Master of Science in de
Ergotherapeutische wetenschap

UNIVERSITEIT GENT · KU LEUVEN · Universiteit Antwerpen · UHASSELT

ARTESIS PLANTIJN HOGESCHOOL ANTWERPEN · Odisee DE CO-HOGESCHOOL · vives hogeschool · THOMAS MORE

HO GENT · PXL · howest hogeschool · artevelde hogeschool LID VAN DE ASSOCIATIE UNIVERSITEIT GENT

MASTER OF SCIENCE IN OCCUPATIONAL THERAPY

Interuniversity co-operation with: UGent, KU Leuven, UHasselt, Uantwerpen, Vives, HoGent, Arteveldehogeschool, AP Hogeschool Antwerpen, HoWest, Odisee, PXL, Thomas More

Faculty of Medicine and Health Science

The Occupational Therapist as a Prevention Advisor in Health and Wellbeing at Work.

Arwhen HUYGHE

Master thesis submitted to
obtaining the degree of
Master of Science in Occupational Therapy

Promotor: dr. Huget Désiron
Copromotor: /
Academic year: 2019 – 2020

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Abstract

Introduction & aim: The Flemish labour market shows a relatively high percentage of absenteeism, which manifests itself in various consequences. Prevention and protection services, consisting of prevention advisers and occupational physicians, promote wellbeing and safety at work in order to prevent this. A shortage of prevention advisers and existing evidence indicate opportunities for other preliminary trainings. This qualitative research focuses on exploring the perceived added value of having an occupational therapy's preliminary training in the practice of being a prevention advisor in Flanders.

Method: A combination of in-depth interviews (with experienced prevention advisors) and document analysis (of education curricula) has been used to collect practice-based and document-based evidence. Results of both methods were compared and based on this; recommendations are made to the clinical practice.

Results: Using verbal transcription of the interview-data, analysis by Nvivo software revealed 8 themes and 21 subthemes, of which the relevant themes with their associated subthemes are discussed. The document analysis resulted in two themes, which are subdivided into different categories existing within the professions occupational therapy and prevention advisor. Overlap between the two professions' curricula is examined and finally compared with the results obtained from the interviews.

Conclusion: Added values of having a prior education in occupational therapy can be found in competences and knowledge such as communication, observation, advising, analysing, collaboration, biomedical sciences, basic ergonomics, therapeutic thinking and the ability to offer confidential relationships. Limitations of the training are seen in the limited presence of courses like prevention, Belgian legislation, ergonomics and labour. Main limitation is the absence of task analyses in the occupational therapy training. Recommendations to the clinical practice are to highlight professional opportunities for occupational therapists within prevention and labour by implementing the hereby missing input in the education and or by offering specialisation training to graduated occupational therapists.

Wordcount master thesis (excluding abstract, table of contents, attachments and references): 11.462

Samenvatting

Inleiding & doelstelling: De Vlaamse arbeidsmarkt vertoont een relatief hoog ziekteverzuimpercentage, wat zich uit in verschillende gevolgen. Preventie- en beschermingsdiensten, bestaande uit preventieadviseurs en arbeidsartsen, bevorderen welzijn en de veiligheid op het werk om dit te voorkomen. Een tekort aan preventieadviseurs en bestaand onderzoek duiden mogelijkheden aan voor andere vooropleidingen. Dit kwalitatief onderzoek richt zich tot het beschrijven van de ervaren meerwaarde in het hebben van een vooropleiding ergotherapie wanneer werkzaam als preventieadviseur in Vlaanderen.
Methode: Een combinatie van diepte-interviews (met ervaren preventieadviseurs) en een documentanalyse (van opleidingscurricula) is gebruikt om personen uit de praktijk en documentair bewijs te verzamelen. De resultaten van beide methoden werden vergeleken en op basis daarvan werden aanbevelingen gedaan naar de klinische praktijk.
Resultaten: Met behulp van verbale transcripties van de interview-data, onthulde analyses via Nvivo software 8 thema's en 21 subthema's, waarvan de relevante thema's met bijbehorende subthema's zijn besproken. De documentanalyse heeft geresulteerd in twee thema's, die zijn onderverdeeld in verschillende categorieën binnen de beroepen ergotherapie en preventieadviseur. De overlapping tussen de twee beroepen zijn onderzocht en ten slotte vergeleken met de resultaten van de interviews.
Conclusie: Meerwaarden van het hebben van een vooropleiding ergotherapie zijn te vinden in competenties en kennis zoals communicatie, observatie, adviseren, analyseren, samenwerken, biomedische wetenschappen, basisergonomie, therapeutisch denken en het vermogen om vertrouwelijke relaties aan te bieden. Beperkingen van de opleiding worden gezien in de beperkte aanwezigheid van vakken als preventie, Belgische wetgeving, ergonomie en arbeid. De belangrijkste beperking is de afwezigheid van het kunnen uitvoeren van taakanalyses in de opleiding ergotherapie. Er worden aanbevelingen gedaan naar de klinische praktijk om tewerkstellingskansen voor de ergotherapeut binnen preventie en arbeid meer te benadrukken, door de hierbij ontbrekende input in het onderwijs te implementeren en/of door een specialisatietraining aan te bieden aan pasafgestudeerde ergotherapeuten.

Aantal woorden masterproef (exclusief samenvatting, inhoudstafel, bijlagen en bibliografie): 11 462

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List of abbreviations

Prevention advisor	PA
Health & Wellbeing	H & W
Occupational therapy/therapist	OT
World Federation of Occupational Therapists	WFOT
American Occupational Therapy Association	AOTA
Interpretative phenomenological analysis	IPA

Preface

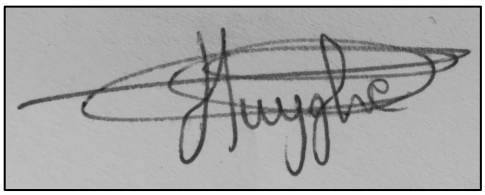
"Arbeid is ongezond. Dat wordt voldoende bewezen door het feit dat 100% van de arbeidsongevallen tijdens het werk gebeurt." (Guy Mortier)[1]

This master thesis is written in order to obtain the master's degree in occupational science. The topics labour, employment and health are my areas of interests within occupational therapy, which is why I wrote this thesis with great pleasure and enthusiasm. However, this does not indicate that no difficulties were faced during the writing process of this thesis. I had to completely immerse myself in a new, and relatively unknown profession for me, namely the profession of the prevention advisor.

This study would not have been accomplished without the help of others, whom I would like to thank. Firstly, and most importantly, I would like to thank my promoter Huget Désiron. Without her support, critical feedback and occasional uplifting words, I wouldn't have been able to achieve this result, and I certainly wouldn't have learned this much with eager and joy.

Next, I would like to thank all participants involved in this study for their essential and vital contribution. At last I would like to thank my family and friends for reading this research and supporting me during my last moments being a student.

Thank you all,
Arwhen Huyghe



[1] "Labour is unhealthy. This is sufficiently proven by the fact that 100% of accidents at work occur during working hours." (Guy Mortier)

1. Introduction

1.1. Background

In 2017, approximately 71.000 work-related accidents were registered at work in Belgium, resulting in at least four days away from work (further mentioned as sickness absence) (3). The European agency for the improvement of living and working conditions, called Eurofound, defines sickness absence as a non-attendance when scheduled to work for three or more days (4). In 2017, the sickness absence rate on the Flemish labour market was 7.64%. This is a fairly high percentage in contrast to other European countries, where a mean absence rate of 3.8% is noted (4; 5). The Belgian Federal Service for Employment, Labour and Social dialogue stated that only 68% of the working population (aged between 15-64 years) are effectively active on the labour market. By 2030, they even predict a decrease in this number and this mostly due to disease (6).

Sickness absence remains a serious public health issue involving several stakeholders, with consequences at individual and societal level (7). Vingârd et al (2004) studied the consequences of sickness absence in relation to the sick individual and concluded that it affects the individual's personal finances, career, inactivity, isolation, quality of life, self-reported health, health service utilization and even in some cases, substance abuse (8). Within the economic perspective, direct and indirect costs are mentioned.
Direct costs include the salary of the absent employee, pension, insurances and so on.
Indirect costs are replacement costs of the sick employee and the effects on productivity, administration, quality of service, etc. (4; 9). A survey conducted by Securex in 2018, showed that sickness absence in Belgium has a total cost of almost 8 million euros a day. A sick worker costs his company on average directly 286 euros per day and indirectly 716 euros per day (10). The increasing importance of preventing sickness absence has its influence on policies of companies and the government (9).

In 1996, the "wellbeing law" was set up in Belgium to define a basic framework on safety, health and wellbeing at work (11). Following this law, wellbeing for all employees should be promoted by their employers and this by providing different types of actions such as risk prevention, collective and individual protection measures, and providing training and information to employees (12).

There are various internal and/or external organisational entities that enable companies to comply with this law and to fulfil these actions. In doing so, every company sets up a welfare policy with its own internal service for prevention and protection at work (ISPP). In some (legally well-defined) cases, companies – obligatory – rely on an external prevention and protection service (ESPP). This is mainly the case for smaller companies in terms of the number of employees. Employers are also able to set up a joint service for prevention and protection (13). Within ISPP and ESPP services, the occupational physician and the prevention advisors (PAs) have specific – legally described – functions as important actors. The law defines various disciplines of specialisation for professionals that deliver specialised services for companies regarding Health & Wellbeing (H & W) such as:

- Occupational medicine;
- Occupational safety;
- Occupational hygiene;
- Ergonomics;
- Psychosocial aspects (14).

Certain educational degrees (BSc, MSc, PhD, …) or a specified number of years of experience in H & W services, are necessary to be legally certified to perform these functions. An overview of the conditions and training that is required to engage in those functions (as defined by law), is presented in attachment A (15).

The legislation, concerning training for the recognition as a PA, does not strictly define the preliminary training of this profession. Focus is not put on the specific content of preliminary training, but more on the level of education that is reached (BSc, MSc, PhD, …).

On the Flemish labour market, shortages on well-formed PAs occur (16; 17). An attempt to compensate for this deficit is to entrust routine tasks, that are normally appointed to occupational physicians, to nurses working at H & W services under supervision of the occupational physician (16).

Canada attempts to solve similar problems by including PAs with other multidisciplinary pre-training courses (18). Their preliminary education level can range from physiotherapists, nurses, exercise therapists to occupational therapists (OTs) or other disciplines, as long as they provide the requested level of education.

A study by Blas et al (2017), shows that OTs offer an added value within prevention and protection teams at work in the Philippines. They concluded that OTs can rely on their expertise regarding client perspective, their knowledge and attention to meaningful activities and the environment of the employee. Additional benefits of OTs in this position, are their training in communication and their skills in applying basic ergonomics (19). Findings of these studies abroad can be inspirational to solve the problem in the Flemish labour market by according a role to the OT in the labour sector, creating new job opportunities to those care professionals (20; 21).

Based on the above reasoning, this master thesis focuses on exploring the perceived added value of the expertise of OTs in H & W, as well as on enlarging opportunities for OTs in the labour sector. Being a part of the education "master in occupational science", this master thesis questions if Belgian OTs (on bachelor level) can be valuable candidates to a function as PA in H & W services.

1.2. Relevance for this study

The World Federation of Occupational Therapists (WFOT) states that the overall goal of OT is to promote health, wellbeing and participation through engagement in occupations (22). OTs do this by enhancing the client's ability to engage in occupations, or things they want to do, need to do, or are expected to do (22). Within the domain of OT, the American Occupational Therapy Association (AOTA) states that "work" is one of the eight occupations they define, besides activities of daily living, instrumental activities of daily living, rest and sleep, education, play, leisure and social participation.

Following the AOTA, engagement in work is essential for the client's health and wellbeing because it supports meaningful participation, personal fulfilment and structure in their daily life (23). Heerkens et al (2019) confirms this by emphasizing that participation through work contributes to independence, self-esteem, emancipation and integration (9).

Work-related practices require specific domains of knowledge, skills and professional behaviour by its practitioners. Adam et al (2011) studied the key domains necessary in this type of practice for OTs and physiotherapists, whereby communication skills, professional behavioural attitudes, a knowledge of anatomy and human function were required in this practice field for both the OTs and the physiotherapists (24).

Following Adam et al (2013), OTs have specific competences that can be used within work-related settings. Other research findings indicate that OTs' holistic vision, communication skills, knowledge on health and medical diseases, can be an extra value within the practice of the function as a PA at work (25; 26).

A recent study of Early et al (2019), emphasized the unique role of the OTs within the workforce. Their background in activity analysis, assessment, job demand modification and health promotion, is suited to face the hereabove (see 1.1) mentioned recent challenges in this area of expertise (27). However, Early et al (2019) also stated the necessity for further research to expand the role of OTs in prevention and return-to-work interventions and to continue the value and contribution of OT in this field of practice (27).

Research into a multidisciplinary preliminary training (such as occupational therapy), within the function of a PA, is already present on a small scale (18; 19). However, currently there isn't a lot known about the contribution of OTs working as a PA in Belgium. Adding to that, a clear statement is lacking on the extent to which OT graduates do have sufficient expertise to make an adequate contribution to prevent sickness absence, not only in the curative but also in the preventive sector.

Due to language issues and the time frame of this study, participants were recruited in a specific area in Belgium (Flanders). In preparation, experts in H & W services were asked about the existing population of PAs who graduated as OTs. They stated that this specific population is poorly mapped but still rather small today. Questions arise why – despite the presence of literature that provides arguments for a possible role of an OT within H & W at work – so little is known of this specific population (PA – OT) and its contribution to the Flemish labour market. Adam et al (2013) explored this problem by investigating the curricula and entry-level of student OTs within the work-related practice field in Australia (25). Their results support the intent of this master thesis to conduct research with focus on the Flemish situation.

1.3. Objective and research question

Based on the previous findings, this research aims to gain more insight into the perceived added value of OTs when performing the function of PA in H & W at work. The findings of that preliminary research (see hereabove) are questioned in practice and linked to curricula and skills as reflected by educational institutions.

Aiming to reach this study's research goal: *"Clarifying the role of OTs in H & W services, working as a prevention advisor (level II or I, see attachment A) in Flanders*.", this research focuses on two issues:

1) Whether having an occupational therapeutic background, when performing the function of PA, can be profitable and if so;
2) Which potential strengths and/or weaknesses are associated with it.

In order to gain more insight in the specific experiences of OTs who work in H & W services as PAs, these persons' opinions on their current practise are gathered, hereby providing practice-based evidence. Additionally, insights on the implementation of occupational therapists' competences is gained by comparing the existing PA training course (level II or I, see attachment A) with the content and level of the occupational therapists' educational curriculum (BSc level, as this is the basis to be allowed to enter the level II PA-training). By questioning experienced practitioners and comparing these results with document-based evidence, an attempt is made to answer the research goal of this study, based on which recommendations can be made towards future practice.

To prepare an operational research question, the PICO – technic was used (28). This technic is used within evidence-based medicine to adequately formulate a clinical and researchable question. PICO stands for **P**atient (to whom it may concern), **I**ntervention (what is the intended intervention), **C**ontrol (with what it will be compared; optional) and **O**utcome (what outcome is expected) (29). Table 1 represents the elements of the PICO with the corresponding elements of the content of this study in order to make a research question.

Table 1: PICO research question

Person	PAs (level II or I) with an occupational therapeutic preliminary training, working in Flanders.
Intervention	Questioning real-life experiences by conducting in-depth interviews.
Comparison intervention	Analysing educational, professional, and competence profiles (OT & PA) by performing a document-analysis.
Outcome	Getting insight in a perceived added value of this specific preliminary training in performing the function of PA and making recommendations based on this, towards education practices.

Based on the PICO above, the following research question is set up:

"What is the perceived added value of having an OT's preliminary training (BSc level) in the practice of PA (level II or I) in Flanders, according to experienced OTs both in real-life and on paper?"

Sub-questions are:

- ➔ Do PAs with an occupational therapeutic background perceive their background as a valuable addition to their professional expertise?
- ➔ If yes, what are the strengths of having an occupational therapeutic background when working as a PA?
- ➔ If no, what is lacking and what can be implemented to OTs education to enhance their ability to engage as a PA?

2. Method

The research proposal of this study was approved by the UGent ethics committee on 29 October 2019 with registration number B670201941427. All participants were informed about this study by an official invitation (see attachment B) and an informed consent (see attachment C) was signed before conducting the interviews. In this study all rules of personal data were applied according to the protection of privacy in line with the Ghent University guidelines (30). All data are protectively stored for 20 years in property of the Ghent University.

2.1. Research design

A descriptive qualitative case study was conducted. Descriptive case studies are used to describe a specific phenomenon or a certain situation, within its own unique context, as completely and in as much detail as possible (1; 54; 55). The "case" of this study represents the less well-known combination of PAs with a preliminary graduation as OT.

A qualitative research design enables to explore a theme in depth, whereby the respondent's values, beliefs, meanings and experiences are mapped (31; 32; 54; 55).

The procedure of the data collection in this study consists of three major parts, listed chronologically according to its occurrence in time (see figure 1 below).

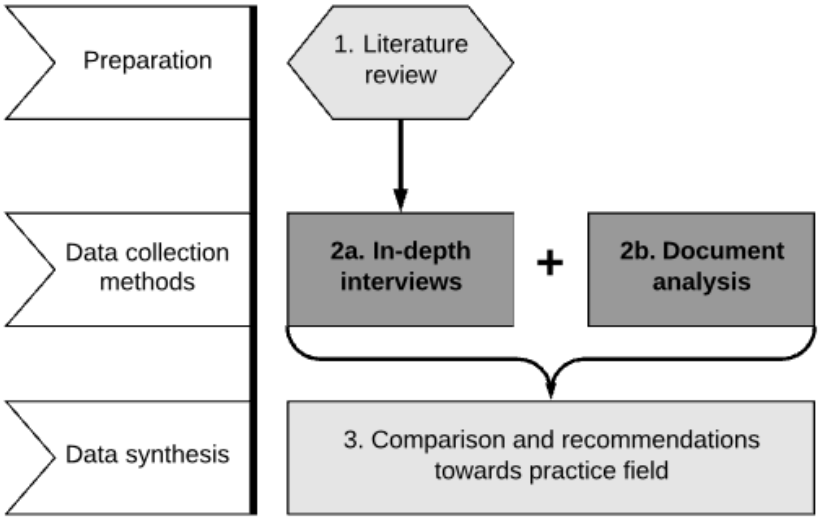


Figure 1: Procedure of data collection methods, as presented in this study

2.2. Literature review

In preparation, a literature review was done to provide evidence and to determine topics for the in-depth interviews, based on subject searching. Subject searching is an iterative search process in which concepts are used as search terms and/or search strings in different databases, in order to obtain information related to the search request (55). The research question and the research objective are taken into account when drafting search terms, search strings and databases. Following Baarda's method for setting up qualitative research, limits were used when too many useless hits are obtained (1).

2.2.1. Data collection of the literature review

Search terms for the literature study were “prevention advisor* (1)”, “occupational background (2)”, “work (3)” and “perceived added value (4)”. Sensitivity and specificity of these terms were taken into account through the use of synonyms (54; 55). Search strings were combined as “1 AND 2 AND 3”, “1 AND 2 AND 4”, “1 AND 2 AND 3 AND 4”, with an overall combination of “prevention advisor* (1)” and “occupational background (2)” as a prior for this research.

Medline (ProQuest), Web of Science, CINAHL (Ebsco) and Pubmed were used as electronic databases. As a limit, literature from 2009 to 2019 was only included to obtain recent publications. A detailed overview of the used search terms, search strings and databases are presented in attachment D.

2.2.2. Data analysis of the literature review

Findings of the literature review were analysed based on title, abstract and content with an exclusion of duplicates and inconsistencies in line with the research question of this study.

2.3. In-depth interviews

Based on the results of the preparatory literature review, the in-depth interviews ‘guidelines were made. Meanings and experiences of people are best charted through the interpretative flow of qualitative research (1; 54; 55). A typical interpretative approach within the descriptive qualitative research is the interpretative phenomenological analysis (IPA). This approach uses in-depth interviews, based on interaction and conversation, to study and understand lived experiences (33; 54).

The phenomenological approach is used more often in OT research because it is congruent with OT values, namely the importance of understanding an individual with its own meanings and experiences in his or her environment (31; 32; 33; 55). In-depth interviews, based on the IPA approach, were used as first data collection method in this research (see figure 1).

2.3.1. Participants

The studied population are PAs with a preliminary training in occupational therapy. By asking experts in the H & W domain when preparing this study, it appeared that the target group is estimated to be rather small, leading to the decision not taking into account the type of specialty (level I or II) of the PA.

Both men and women are eligible, any specific criteria regarding age, years of experience or types of companies they work for, won't be used to in- or exclude potential respondents but are taken into account when analysing the results. Only PAs level I or II, working in Flanders, who previously graduated in occupational therapy are included. Level III PAs (see attachment A) do not require a bachelor's degree according to regulations and are therefore not included in this study. Since the study took place in Flanders, data collection- and analysis were done in Dutch.

Concluding, inclusion criteria defining the sample for this study are:

→ Having an OT bachelor's degree;

→ Practicing the function of PA level II or I (acknowledged by the government);

→ Working in H & W services in Flanders, Belgium.

To recruit participants, purposive- and network sampling was used as sampling techniques in this study. According to purposive sampling, participants were recruited based on the specific inclusion criteria, whereby network sampling was allowed. Based on this, new participants were recruited through networking of existing participants and this because of the fact that the requested profile is little known in Belgium (54; 55). Experts, approved training centres, professional organisations, LinkedIn and networking were used to chart the population. Suitable participants were contacted for further participation to this study.

2.3.2. Data collection of the in-depth interviews

Data-collection of the in-depth interviews was realized with the use of the interview questionnaire (formed on the basis of the preparatory literature review), an audio recorder and written notes from the researcher. Participants were contacted via e-mail and received the official invitation, including the informed consent letter.

After their agreement to participate in the study, they indicated a place and time for the interview. Usually, the interviews took place at their work and lasted for about one hour. Before the start of the interview, the informed consent was reviewed and, after mutual consent, signed by all participants.

2.3.3. Data analysis of the in-depth interviews

The data analysis of the in-depth interviews was realized by using Nvivo software. After conducting the in-depth interviews, all data from the audio-recorder were verbally transcribed. Figure 2 gives an overview of the followed procedure (phases) when analysing the data.

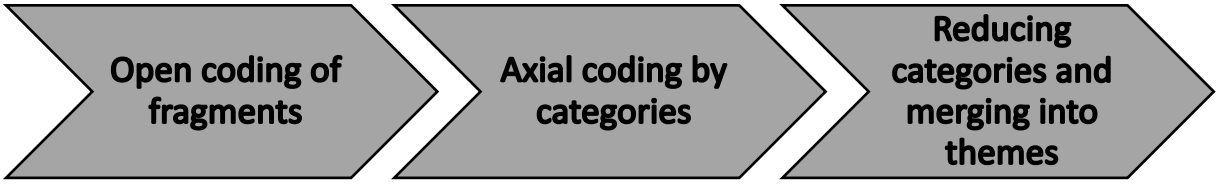


Figure 2: Overview of coding used in this study (1; 2)

Following Baarda's (2018) method supported by Mortelmans (2017) (1; 2), open coding was used in a first phase of the interview analysis by using Nvivo. During this phase, fragments were selected that were relevant to the research, with the attachment of one or more codes describing the content of that fragment.

During the next phase, axial coding was done. After dividing the text in different separate codes, the codes were reassembled in a coherent structure (categories). These categories represent codes that belong together due to an underlying and common theme (1; 2).

Reduction of these categories into common themes, is the last phase of the data analysis. These themes were used to interpret and form an answer to the research question, as the first data collection method of this study (see figure 1).

2.4. Document analysis

Following Bowen (2009), a document analysis is the systematic procedure of analysing both electronic and printed documents whereby data is examined and interpreted to obtain meaning and understanding, conform to qualitative research methodology (34). It provides background and context of the researched phenomena and verifies findings from other combined methods.

In this study, document analysis is used to explore content of OT curricula in order to link that content to results of the in-depth interviews, enabling to answer the research question as the second data collection method (see figure 1) (34; 35).

2.4.1. Data collection of the document analysis

Electronic documents were searched on the internet. Due to the limited presence of scientific evidence, the search was mainly done for grey literature, taking into account certain limits in order to guarantee the quality of evidence. Used limits were government sources, information provided by official professional associations and recognised educational institutions.

Due to the fact that this study was performed in Flanders, Dutch search terms were used in this document analysis. Search terms like "ergotherap*(1)" and "preventieadviseur*(2)" were used in order to obtain the most relevant information. Sensitivity and specificity of these terms were also taken into account in this search, by the use of synonyms. Search strings consisted of only (1) or only (2), overlap between (1) and (2) was later examined in a comparison between the findings of this document analysis. A detailed overview of the used search terms, search strings and databases are presented in attachment E.

2.4.2. Data analysis of the document analysis

The systematic procedure of document analysis entails finding, selecting, appraising and synthesizing data from the included documents. It is performed in four steps (34; 35; 36):

1) First, relevant documents must be found. In this study, knowledge or competences for both professions were searched. This was done by snowball- and convenience sampling, taking into account the limits and search terms established at the beginning of this study;
2) Secondly, only literature in line with the research question, was selected. Selection is based on the quality of the various sites, author of the source, recency and credibility;
3) Thirdly, these selected sources were carefully reviewed for content whereby data is then organised into major themes and categories;
4) Finally, a comparison is made of the remaining sources for both professions separately.

The process of implementing these four steps can be summarized as searching for documents, superficial reading of the documents, thorough examination of the selected documents and interpretation of the data in the selected documents.

2.5. Comparison and recommendations

Based on the results of the in-depth interviews and the document analysis, a comparison of results of both parts in this study was made to enhance understanding and to answer the research question as accurate as possible. Afterwards, recommendations were made directing to the educational field about the possible perceived added value of having an OT background when working as a PA. By combining these results, the overlap is as large as possible increasing chances that consensus between the different data collection methods is found.

2.6. Reliability and validity

Despite having a small target population, inclusion criteria were designed to ensure a reliable sample as representative and homogeneous as possible (54, 55). Only OTs with a bachelor's degree were included since the population of OT's with a masters' degree in Belgium is rather small due to the only recent installation of the education "master in occupational science". Taken into account the limited number of OT's working as a PA and striving for an optimal homogeneous sample, strict in- and exclusion criteria could be a restriction for the recruitment of this research. Nevertheless, an attempt was made to sample PAs from all of the legal specialisations (see 1.1) to include the four kinds of specialisation as a PA (occupational safety, occupational hygiene, ergonomics and psychosocial aspects).

Because this study took place in Flanders, the interviews were done in Dutch. After transcribing the interviews, the final documents were sent back to the participants for member checking in order to enhance reliability of the collected information (54; 55). A member check was done for all participants recruited in this study. The participants were free to make any comments and/or changes in the document. Only after approval, the final documents were used for further analysis. When presenting the results of the interviews (see 3. Results), quotes and (sub)themes were manually translated from Dutch into English with attention to interpretation and meaning as accurate as possible.

In qualitative research, it is often used to combine data collection methods. Combining and comparing two or more of these methods increases validity whereby systematic errors are avoided. Possible bias is reduced in this study by combining and comparing all data coming from the in-depth interviews and the document analysis (1; 54; 55).

3. Results

Results of this study are obtained by using the preparatory literature review to form the interview questionnaire together with the combination of the data collection methods, namely the in-depth interviews and the document analysis. Findings of these two data collection methods are used to make a comparison and create recommendations. The results of these different methods are further discussed separately.

3.1. Participants

Initially 21 potential participants are contacted by e-mail. Finding and contacting these potential participants is done according to the approach described in the method-section (see 2.3.1). Of these 21 possible participants, there is a dropout of 12 participants. Six of which no answer is received, five of them did not meet the inclusion criteria and one drop-out during the study due to the lack of time of the respondent. At the end, nine participants are included in the interviews. The data and characteristics of the included participants are described in table 2.

Table 2: Data and characteristics of the included participants

Gender (M/F)	Age	Graduation year as an OT	Level and specialisation as a PA	Years of practice as an OT-PA	Date of interview
F	35 years old	Graduated in 2006	Ergonomics – Level II	9 years of practice	November 22, 2019
F	36 years old	Graduated in 2005	Ergonomics – Level II	11 years of practice	November 26, 2020
F	38 years old	Graduated in 2005	Occupational safety – Level II	9 years of practice	January 31, 2020
F	38 years old	Graduated in 2017	Ergonomics – Level II	3 years of practice	January 17, 2020
M	42 years old	Graduated in 2000	Ergonomics – Level II	2 years of practice	January 22, 2020
M	43 years old	Graduated in 1999	Occupational safety – Level II	13 years of practice	February 5, 2020
F	44 years old	Graduated in 1999	Psychosocial aspects – Level I	15 years of practice	February 21, 2020
M	51 years old	Graduated in 1990	Occupational safety – Level II	18 years of practice	November 8, 2019
M	54 years old	Graduated in 1987	Ergonomics – Level I	22 years of practice	January 20, 2020

3.2. Literature review

After entering the search terms, search strings and limits as predefined in the selected electronic databases, 41 articles are obtained.

After excluding on the basis of duplicates, 29 articles remained. These remaining articles are assessed based on title and abstract in function of the research question of this study, after which eventually 14 articles remained.

As a final step, these 14 articles are examined based on their content in line with this research, of which finally 10 articles remained. Attachment F provides a flowchart of the number of hits and remaining results after analysis.

The 10 remaining articles are used to enable identification of suitable topics to construct interview questions (see attachment G) in function of the in-depth interviews. A semi-structured interview is chosen to map the experiences as detailed as possible.

3.3. Analysis of interview data

Experiences of OTs working as PAs are questioned, recorded and annotated (see method section 2.3). During the interviews, the focus was on this specific combination (OT – PA) with its strengths and/or weaknesses.

The analysis of these interviews' transcriptions led to 8 themes and 21 sub-themes (see table 3).

Table 3: Themes and sub-themes from the interview analyses

	Themes		Subthemes
1	Bachelor OT	**1**	Motivation to pursue it
		2	The structure/form of the program
		3	Location/where followed?
		4	Personal meaning of the profession OT
2	The PA training	**5**	Motivation to pursue it
		6	Education as PA
		7	Personal meaning of the profession PA
3	The position of OTs	**8**	Professional experiences as OT
		9	Different kinds of job functions
4	The position of PAs	**10**	Professional experiences as PA
		11	Different types of employment places
5	The OT as PA	**12**	Overlap between OTs and PAs
		13	Specific OT skills
		14	Familiarity with the combination of OT and PA

6	Other preliminary training as a PA	**15** **16**	Fellow PAs Differences towards pre-training
7	Recommendations towards education	**17** **18** **19**	Flaws in OT training OT training reforms PA training reforms
8	Additional information	**20** **21**	Other educations Other work experiences

There is a difference in relevance according to their contribution to answer the research question.

There are (sub)themes that are less relevant because they mainly represent background information. This background information is not useless but has its value in understanding the complete situation. For example: theme one provides specific information about the bachelor of OT and theme two provides more information about the training to become a PA. Both provide more background information necessary to understand the later combination between the two professions but are not directly linked to it.

The themes that are discussed in the results section are focused on the combination between OT – PA and the personal experiences linked to this combination according to the participants. A critical reflection on the decision to use a selection of the total (sub)themes can be found in the discussion section of this study.

In this results section, out of the total number of (sub)themes, only three themes with their associated sub-themes are discussed further in detail. Table 4 provides an overview of these three themes, with its associated eight sub-themes.

Table 4: An overview of the selected (sub)themes

	Themes		**Subthemes**
1	The OT as PA	**1** **2** **3**	Overlap between OTs and PAs Specific OT skills Familiarity with the combination of OT and PA
2	Other preliminary training as a PA	**4** **5**	Fellow PAs Differences towards pre-training
3	Recommendations towards education	**6** **7** **8**	Flaws in OT training OT training reforms PA training reforms

3.3.1. Theme one: The OT as PA

As an introduction to each interview, the participants' prior education and previous work experiences are discussed, followed by their opinion about the combination between OT and PA, and how they experience it in their professional reality.

Depending on their interests before, during and/or after their OT studies, they continued their professional development by becoming a PA. Their interests are reflected in the specialisation they eventually have as a PA. OT, as their previous training, is often seen as a strength in which some specialisations such as ergonomics are seen as more obvious and more suitable than other specialisations.

> *"I feel strong at the moment because of the combination I have as an occupational therapist within this job. Occupational therapists have strong profiles on the human level which is useful and actually also important within the function of prevention advisor." (7; lines 47-50)*
> *"I think the link to prevention advisor ergonomist is stronger than prevention advisor occupational safety." (1; lines 146-147)*

The strengths of their previous training in OT, within their current position as PA, are appointed in the form of specific OT skills, knowledge and/or attitudes that they learned in their preliminary training and are still using in their current employment situation.

> *"I don't think it's purely about skills but more about the knowledge and attitude to look at humans as a whole. The attitude of looking wide enough and looking at the human being as a whole are things we know from the training. The knowledge from the (para)medical field is also an advantage for us, because prevention advisors from a more technical background have less of that. It's more about knowledge and attitude than about skills, and these are now more in line with the modern vision within the world of prevention." (5; lines 53-59)*

These specific skills, acquired from their previous OT education, are labelled by them as being creative, being strong communicators, being able to observe and work together in teams. Participants experience a strength in acquired knowledge from their previous OT training, such as having a background in ergonomics and having medical expertise.

> *"For me, the biggest strengths of having a pre-education in occupational therapy within the position of prevention advisor are having medical knowledge, a background in ergonomics, being able to adopt a therapeutic relationship of trust with employees and being able to think creatively for solutions and adaptations." (2; lines 40-43)*

According to the participants, the decision to become a PA with their prior training in OT was only taken later in their career. Participants stated that they often were not aware of this employment option as an OT. According to them, making this combination more visible would be an improvement to the popularity of this combination.

> *"I'd never heard of it myself and I don't think it's in the OT training either." (1; lines 161)*
> *"Provide more information within the occupational therapy training with what the place can be as an occupational therapist within the business world so that more people are stimulated to make the step to that prevention world." (3; lines 86-88)*

3.3.2. Theme two: Other preliminary training as a PA

At the beginning of the interview, the different preliminary training courses of the participants are discussed, and it is stated that there is a general diversity of pre-training courses within PAs. The training of a PA does not set any conditions to a specific pre-education content (only the education level, see attachment A), so there is a lot of variation in the preliminary training of PAs. This diversity manifests itself in different perspectives from which PAs work. Participants often see this variation in different preliminary trainings, in the team they work. They have colleagues from different backgrounds, each with their own strengths.

> *"There are L.O. teachers, physical rehabilitation scientists.... We all have knowledge of the human body and its movements, but one has more specialty than the other. Some are technically stronger, others look wider, and so on." (3; lines 79-81)*

Participants compare these differences of colleagues with their own preliminary training as an OT. They experience strengths because of the specific OT skills and knowledge learned during their training. However, they mention that it does not necessarily lead to one preliminary training being better than another in becoming a PA.

> *"I often miss something with other prevention advisors. Not that they can do anything less than I can, but I miss the physical knowledge, the human actions that we as occupational therapists do have. I think it's important to have knowledge about human actions within the work as a prevention advisor. You have to be used to working with people." (7; lines 43-47)*

3.3.3. Theme three: Recommendations towards education

After discussing the overlap between the two professions and the differences they see with other preliminary trainings, PAs stated that newly graduated OT students are not ready to work in this type of job. According to participants, the OT training is too limited to become a PA and additional training is necessary in the graduation process.

> *"However, I do notice that students in general are not yet sufficiently educated to work as a prevention advisor or in the workplace. I think that the occupational therapist can have a role within ergonomics and his tasks or within occupational reintegration and his tasks, at least when the right additional training is provided." (9; lines 38-41)*

The participants agree that a newly graduated OT is not prepared enough to take the step to become a PA. As a reason for this, they indicate that students have a wide-ranging knowledge, but are often under-specialised in a certain topic with limited in-depth knowledge. They declare a need for further specialisation within the training. Participants indicate that prevention and labour must be made more visible within the training and certainly as an employment possibility.

> *"The training is mainly focused on the curative, so giving treatments, therapies, and so on. The prevention part is given very little." (7; lines 56-57)*
> *"Of those three years, you've seen a lot of the four different areas within occupational therapy, so you know a little about everything, but you can't specialise yourself." (8; lines 107-108)*

In line with the flaws they indicate regarding the OT training; participants report that OTs are still often seen within the curative sector while there is a great possibility to engage professionally in the preventive sector or in business settings. Updating the education for OT by providing more specialisation opportunities or offering workshops, internships and/or guest lectures, would make the role of the OT in prevention and labour more visible.

> *"I am convinced that "work" is a suitable domain for the occupational therapist and certainly also the preventive sector. But this needs to be made more widely known within the training courses. … Occupational therapists are so used to working in the curative sector that they are often a bit shy of the preventive sector, but I certainly think we can add value to that, provided that we have the right additional training because the bachelor himself only provides limited knowledge about this." (7; lines 58-67)*

Reforms are not only suggested towards the OT training by the participants, but also towards the training to become a PA. Participants notice that the training mainly focusses aimed at large industry companies and less at the care sector or SMEs[2]. However, the latter type of companies is more present in Belgium.

The ability and learning to mediate between different actors, is also seen as essential by the respondents but is – according to them – missed within the current training of a PA.

> *"The training prevention advisor is really focused on industry. The large manufacturing plants while the majority of prevention advisers work in SMEs, smaller companies, in the care sector or in hospitals." (1; lines 200-202)*
>
> *"This is also something you learn. How can you convince those two groups to work together on what is needed, because this is the ultimate goal and that can only be achieved by mediating. To know how to do this emotionally. They don't really tell you that in the prevention advisor course." (1; lines 452-455)*

3.4. Analysis of documents

After applying the predetermined search terms, search strings, databases and limits (see method section 2.4 and attachment E), 19 documents are obtained and selected, consisting mainly of grey literature. Attachment H presents an overview of these and their analysed data. This overview represents step one and two of the data analysis (see method section 2.4.2), whereby documents are searched and selected considering the predeterminant search terms, search strings, databases and limits. These 19 documents consist of 11 obtained by applying the search string (1) and 8 obtained by applying the search string (2). This means that 11 documents, out of the total 19, give more information about the profession of OT, and 8 documents reflect the same but for the profession of PA.

In step three of the document analysis, the remaining documents are further skimmed, read and interpreted for content, whereby the analysed data is then organised into categories and themes. In all 19 documents the data is organised into two themes, namely knowledge areas and competences. These themes represent what kind of knowledge and skills are necessary to perform the profession of OT and PA and what is learned in their education programs.

[2] SMEs stands for small and medium-sized enterprises.

These themes are then further divided into categories, related to the profession of OT or PA. These categories represent specific courses and concrete skills, learned within the training of the two professions. For the OT profession, there are five categories within the theme of knowledge, and 12 categories within the theme of competences. An overview of the areas of knowledge and competences for the OT is available in attachment I.

For the PA profession, the categories of the theme of knowledge is divided into the different specialisation courses possible within PA (see attachment A), namely the basic multidisciplinary training in general, the specialisation of occupational safety, ergonomics and psychosocial aspects. Another specialisation within PA, namely occupational hygiene, is not further discussed or analysed since this specialisation does not occur in the participant population and therefore no statements can be linked to it.

Four categories are found in the theme of knowledge, for the basic multidisciplinary training. Another four categories are distinguished in the theme of knowledge, for the specialisation of occupational safety. For the specialisation of ergonomics, six categories are found in the theme of knowledge. Finally, four different categories are found in the theme of knowledge for the specialisation of psychosocial aspects. For the theme of competences, twelve specific competences are obtained out of the 8 documents related to the profession of PA. An overview of these themes and categories related to the profession of PA is presented in attachment J.

In step four of the analysis of documents, a comparison of the themes and categories between the two professions is made in order to determine where and how much overlap there is between the two professional educations. An overview of the used procedure while analysing the documents can be found in figure 3.

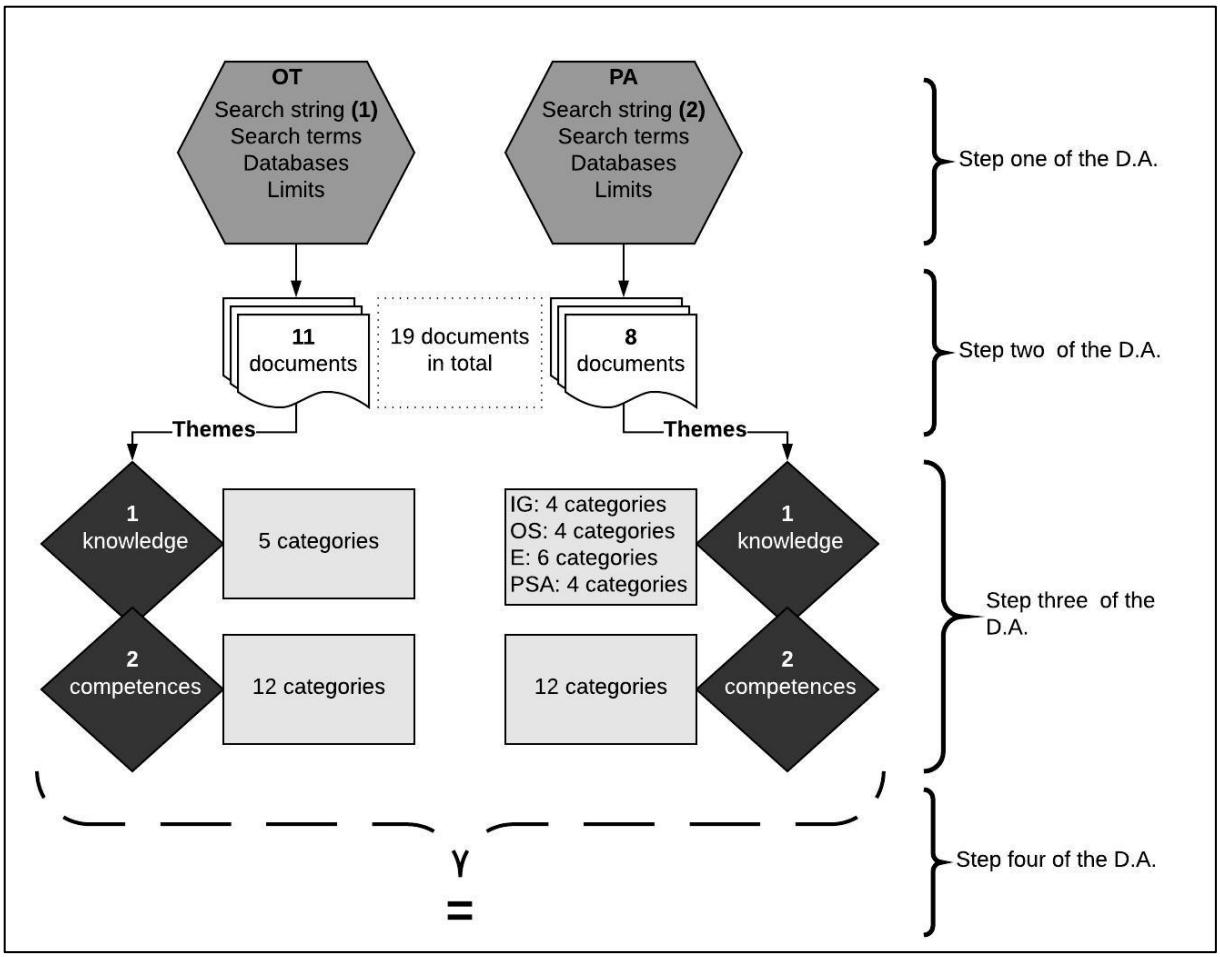


Figure 3: A schematic overview of the document analysis performed
Legend: OT = occupational therapy, PA = prevention advisor, D.A. = document analysis, IG = in general, OS = occupational safety, E = ergonomics, PSA = psychosocial aspects

The comparison made in step 4 of the document analysis, examines the extent to which the knowledge and competences acquired in the OT training course are sufficiently present and useful in the practice of the position of PA. This comparison shows that the acquired biomedical knowledge from the OT training is sufficiently present in the education program and is also useful in the practice of the function of PA. This biomedical knowledge is mainly useful in parts of the profession of PA, like accidents and damage claims, risk management- and prevention, safety and health. These findings indicate that for this category within the theme of knowledge, there is a large overlap (++) between that of OT and the PA. A second category within the theme of knowledge, namely social sciences, has a limited presence within the OT training. It mainly concerns courses such as legislation, psychology, law, etc. and usually occurs as a minor course in curricula.

Despite the limited presence within the OT training, the comparison's findings suggest that this knowledge is useful within the practice of the function of PA and this mainly for psychosocial functioning and policy, preventing and tackling undesirable and transgressive behaviour, stress, burnout and wellbeing. For this category within the theme of knowledge, the findings indicate a moderate overlap (+) between that of OT and PA.

The same applies to the last overlapping category within the theme of knowledge, namely occupational sciences. This category includes courses such as prevention and ergonomics that have a limited presence within the OT training, but are useful within certain tasks when practising as a PA, such as the need for having a basic knowledge of ergonomics and the development of a prevention policy. Given the limited presence within curricula of OT and its usefulness within the function of PA, this overlap is considered moderate (+).

Overlapping skills that appear within the OT training and prove their usefulness in the practice of the function of PA, are categories of the second theme such as communication, observation, evaluation, analysation, advising, being independent, being a team player and coaching. Since these skills are trained within the OT training and are needed as a PA, there is a large overlap (++) between both professions of this second theme, namely competences. Table 5 shows an overview of the overlap between these two professions, based on required knowledge and competences as detected by the document analysis. Remaining categories from step 3 of the document analysis that are not included in table 5, show no similarities between the two professions for both the first and the second theme and are therefore not mentioned in this comparison.

Table 5: Overview of the overlap between the required knowledge and competences of the OT and the PA

Knowledge		**Competences**	
Biomedical knowledge <u>is useful for</u> ○ Accidents and damage claims ○ Risk management- and prevention ○ Safety and health	**++**	• Communication • Observation • Evaluation • Analysation • Advising • Independent • Team player • Coaching	**++**
Social sciences (like psychology, law and legislation) <u>is limited presence but useful for</u> ○ Psychosocial functioning and policy ○ Undesirable and transgressive behaviour ○ Stress, burnout and wellbeing	**+**		

Occupational sciences (like ergonomics and prevention) is limited presence but useful for ○ Basic knowledge of ergonomics ○ Development of a prevention policy	+		

3.5. Comparison and recommendations

As a final step in the data collection procedure of this study (see figure 1), findings from both the interviews and document analysis are synthesised into a comparison. The two themes knowledge and competences, with their related categories, are compared and examined for congruencies or differences between the two professions (OT and PA). Congruences between the two professions show strengths in the OT training when practicing as a PA, while differences indicate weaknesses of the OT training when being a PA. Based on this, recommendations can be made towards education practices and the government.

3.5.1. Comparison of findings from both data collection methods

The comparison enables to connect evidence-based literature with lived experiences in the field (practice-based evidence). Detected differences and congruencies, can clarify whether or not OT can be seen as a valuable professional background for PAs.

Strengths of having an OT background training when working as a PA occurs in two forms, namely in the form of knowledge and competences. Knowledge like biomedical sciences, basic ergonomics, therapeutic thinking and confidential relationship are seen as strengths in both the findings of the interviews and the document analysis within the OT's education program when working as a PA. Strengths in the form of competences that occurs in both the findings of the interviews and the document analyses, are communication skills, advisory skills, observation skills, collaboration skills and analytical skills.

Weaknesses that are mentioned in findings of both collection methods, are the limited presence of knowledge on labour, the Belgian legislation, advanced ergonomics, and the role of the OT in prevention in the OT's education. A course that isn't present as such in the OT education and that is perceived as a weakness, is the ability to perform risk analysis in the workplace. An overview of these strengths and weaknesses is given in table 6.

Table 6: Strengths and weaknesses of having an OT background when working as a PA

Strengths of having an OT background in the function as prevention advisor	**Weaknesses** of having an OT background in the function as prevention advisor
→ Competences • Communication skills • Advisory skills • Observation skills • Collaboration skills • Analytical skills	• Labour is limited presence in an OT's education, depending on the university college. • Ergonomics is limited present in an OT's education, only in the form of ergonomics within care. • The Belgian legislation on labour and H&W is limited present in an OT's education. • The role of an OT in prevention is limited present in an OT's education. • Performing risk analyses isn't present in an OT's education.
→ Knowledge • Biomedical sciences • Basic ergonomics • Therapeutic thinking • Confidential relationship	

3.5.2. Recommendations based on the comparison

Based on the comparison of the findings for both data collection methods, three main recommendations can be made towards education authorities to promote the role of an OT working as a PA within H & W services. One main recommendation can be made towards the government, regarding the current lack of expertise in prevention and protection services at work.

Recommendation one directed towards OT education authorities
Offer more opportunities for specialisation within the OT's education to enable new graduates to be better prepared towards the professional field of a PA.

The possibility of further specialisation within the OT training course was indicated as an opportunity for educational programs to strive for. The current bachelor program consists of three years in which many different types of knowledge are included. Students gain many competencies when graduating but they do not have in-depth knowledge in any specific domain in which OT's are professionally engaged. Participants indicated that this can be compensated by attending postgraduate programs, but they still recommend a further possibility for specialisation within the bachelors' education itself to prepare students more for an – at date – under focused job market.

Recommendation two directed towards OT education authorities
Integrate labour more within the OT's education to prepare new graduates for a job as an OT working in H & W services in the labour sector.

After conducting the document analysis, it emerged that only 3 of the 8 Flemish university colleges, offering OT-education, provide within their curriculum a course that includes the needed content on labour, H & W. Even though, they indicate an employment opportunity for the OT within the labour sector by mentioning this place of employment in their brochures of the OT program.

Content regarding the hereby mentioned issues, is less visible in the OT's education curricula because it is often integrated within existing courses. Making this employment opportunity more visible by expanding the course of labour within curricula of the Flemish university colleges, can result in more people moving in this direction of the later work field.

Recommendation three directed towards OT education authorities
Make the role of an OT within labour and prevention more visual in the education of OTs through guest lectures, workshops, internships, etc. in order to promote this understated employment opportunity.

Participants indicated that, as students, they were often unaware of this employment opportunity. The OT is mainly seen as a professional within the curative sector, while he is certainly useful within prevention and in business settings. Making the role of the OT within prevention and the labour sector more visible within the training courses by providing, for example, guest lectures, workshops, internships, etc., promotes this employment opportunity so that further profiling of the OT within labour will follow.

Recommendation four directed towards the Belgian government
Encourage OTs more during their studies, so that they are better prepared to become PAs tackling the lack of expertise within prevention and protection services.

As indicated in the introduction part of this study (see 1.1), a shortage of well-formed PAs occurs in the Flemish labour market, whereby tasks are passed on to occupational nurses. Studies show potential in other multidisciplinary trainings like the OT profession. If the PA employment opportunity is made more visible within the OT training, graduates are stimulated more to move in this employment opportunity. In this way, the current shortage of PAs in the Flemish labour market could decline.

4. Discussion

The results of this study provide more insight into the added value of a preliminary education in OT within the practice of the PA in H & W services. In order to arrive at these results, experienced people in PA functions are questioned (practice-based evidence) and the emerging findings are compared with document-based evidence. Strengths, experienced difficulties and limitations of both the methodology and findings in this study, are examined in function of their validity and reliability. The final results are linked to already existing research and the objective of this study, in order to finally come to recommendations and suggestions for follow-up research and the clinical practice.

4.1. Concerning methodology

The combination of both practice-based and document-based evidence is seen as a strength providing a contribution to the reliability and validity of the results obtained. By using both methods and comparing their results, a broader view is obtained in which differences and similarities are examined. Both methods are displayed transparently by presenting the research process as clearly and comprehensively as possible. The interviews and document analysis are conducted in Dutch and are translated afterwards. Possible bias has been prevented by translating with care and attention to interpretation.

In the in-depth interviews, the use of the Nvivo software, the audio recordings and the member check provide a more accurate and verifiable picture of the data analysis. Participants are sampled as representatively as possible, striving for a balanced proportion between possible influencing characteristics of the participant population. Both older and younger PAs were questioned, taking into account their years of experience which can have an impact on the results. An attempt was made to question PAs from all legal H & W-specialisations; however, this could not be met because no participants could be sampled from the occupational hygiene specialisation.

In addition to the transparent reporting of both data collection methods, the data analysis is conducted systematically, staying as close as possible to the raw data. In this way, random and systematic errors are avoided as much as possible by consistently conducting the presented methodologies as defined in the beginning of the study. Methodological choices in the context of data collection and analysis are described as precisely as possible, allowing the possibility to reflect on difficulties faced during the performance of this study.

During the performance of both data collection methods, difficulties are experienced in rigorously applying both chosen methodologies. Difficulties experienced during the interviews are limiting the conversation to its essence, minimising unnecessary discrepancies. This experienced difficulty proceeded better towards the latter interviews. During the verbal transcriptions of the interview data, difficulties are experienced in the different dialects among the participants. The clean-up of the interview data is done based on feedback obtained from the member check of the participants.

When performing the document analysis, mainly grey literature is found on the internet. The broad search area of the internet made the search for quality sources difficult. Consistently applying the predefined set of limits in function of the research question, is a help in this internet search. Nevertheless, there is some inconvenience to find corresponding training curricula for the profession of the PA. The training to become a PA is possible in different types of education such as evening classes, shortened programs, and so on, which made the search more extensive. Government sources provided more clarity in these different types of education for the PA, which facilitated the analysis of these documents.

The two main limitations of this study are its specificity and complexity. The specificity can be found in the objective of this study, namely that it focuses on a specific and relatively unknown combination between two profession (OT – PA) in which the added value from one profession (OT) to another (PA) is examined. The specificity of this research limits the transferability and generalisability to settings elsewhere in the country or abroad. This because of specific Belgian regulations and the restricted time limit in this study, whereby only Flemish PAs are questioned. The limited existence of corresponding scientific evidence can be explained by the high degree of specificity in this study. That being said, recommendations can be made for the clinical practice similar to the intent of this study.

The complexity of this research can be found in the organisation of the PA profession with a varying and divers' legislation. Legislation differs between the internal and external services of prevention and protection at work, as well as between the different specialisations that PAs can have. In this study, an attempt is made to conduct a sampling that is as rich and representative as possible, in order to meet this complexity.

Due to the limited population of PAs with a previous education in OT, it was therefore decided to only include OTs with a bachelor's level, whereby OTs with a master's degree are excluded. Nevertheless, a sample is obtained that fits as well as possible with the varying specialisations and settings PAs can have. The complexity and lack of literature indicates the need for future follow-up research.

4.2. Concerning findings

After obtaining the results of the interviews, it was decided to discuss only a limited number of the total (sub)themes in the results section. This, because some (sub)themes provide more background information instead of focusing on the experience of combining the two professions. In doing so, three out of eight themes with their related sub-themes, are discussed. It is important to note that these other themes are still presented at the beginning of the results section. This, to illustrate the fact that each interview started from initial background information to eventually come to the essence of the interview. Despite, not discussing the other five (sub)themes in the result section, the recorded content was necessary for the researcher to understand the final results of the interviews.

Qualitative research has its limitations because there is more probability for interpretation. Both used methods are vulnerable to bias, generated by interpreting data. This bias is prevented as much as possible by systematically working according to procedures and the rigorously use of software. Even though much care was taken, this type of bias can't be completely excluded for both the interviews and the document analysis. A certain degree of interpretation should be present to guarantee the authenticity of data as much as possible. Possible interpretations by participants and the researcher should therefore be taken into account.

The document analysis is used to gain more insight in curricula of both professions' educations. OT training curricula are only examined with a potential professional transition to practicing as a PA. Results of this study do therefore not apply to other professional transitions.

Comparing the necessary knowledge and competences for both professions, enables investigation whether (or not) OT education programs include a course focussing on labour. This appeared important because participants stated that this specific content was absent when they had their OT training. The document analysis examines whether separate courses concerning labour are present in the OT's education. Courses regarding labour included in OT's education under a different name, could therefore be unnotified in the document analysis. Because of this, there is a chance that the course labour is more present in OT programs than the document analysis shows. This should be taken into account when interpreting the results in this study.

The purpose of this study is to gain more insight into the OT, working as a PA, obtained by questioning experienced professionals and comparing this with training curricula. Although results show that OT offers an added value, this remains a perception according to the participants. This interpretation is supported by the results obtained from the document analysis but does not indicate that having one prior OT education would be a better foundation for a PA-certification, than any other.

Through these results, recommendations are made for educational institutes to promote the OT more in this relatively new work field and to prepare new graduates for this field of practice.

Awareness among graduated OTs of a fulfilling employment opportunity in H & W-settings, could stimulate them to engage in that professional direction and thereby provide an answer to the lack of specialised staff in the current I- and/or ESPP services.

4.3. Link between current research and the objective of this study

Results of this study are linked back to already existing research, to compare which congruences and/or differences occur. Firstly, the importance of the legal context in Belgium is discussed to better understand the intent and results of this study. After this, the comparison between this study and current research is focused on the position of (para)medical professionals in H & W services at work. Next, the presence of relevant knowledge in Flemish OT education programs is discussed when wanting to work in the labour sector. At last, the integration of Flemish OTs in prevention, labour and H & W services is compared to other international studies.

4.3.1. Importance of legal context

Publication of research findings that are line with the research objective of this study, are rather scarce. Labour, and its legislation, is often organised locally depending on the country which means that different structures and a variety of professionals exist in terms of prevention, wellbeing and protection at work. In Belgium, "labour" is spread across the different legislative authorities, each with its own jurisdiction. This means that a generalisation of this study to Belgium as a whole, is hindered by the legislative structure and complex regulations.

4.3.2. (Para)medical professionals integrated in H & W

(Para)medical professions are increasingly finding their way within the labour sector. Professions such as medical doctors, nurses, …, are more and more common in the field of labour (18). As a member of the (para)medical professional community, the OT is also making his debut to finding its place within "labour". More and more research is conducted into the possible role of the OT within prevention and labour (7; 19; 26; 27). Just like this research, it investigates whether the OT can have a role as a PA within the preventive labour sector. Findings from the hereabove presented research suggest that there is indeed an added value to having a previous education in OT within "labour", and that the OT therefore certainly has his place within prevention and labour. These findings are supported by earlier research conducted in Canada, the Philippines, Australia and America (7; 18; 19; 24; 25; 26; 27).

4.3.3. Presence of relevant knowledge in OT education

Secondly, this research investigates where and how the added value of a pre-education in OT occurs in the practice of PA. For this purpose, not only people are questioned but also curricula are compared. The methodology is similar to an already existing study in Australia, in which professionals are questioned and key attributions of curricula are compared (24; 25). The difference with the Australian study is that the sampling consisted of OTs within the curative sector of labour and not within the prevention sector, as is the case in the hereby presented research. Other studies use different methodologies and/or have a different intent (7; 18; 19; 26; 27).

Despite the different methodologies and sampling populations from the existing studies, similar findings emerged in what is presented hereabove. Equivalent added values have been identified in the form of knowledge, skills and professional behaviours. Similar findings are success factors such as open communication, collaboration skills, psychosocial skills, biomedical knowledge and having a knowledge of basic ergonomics (7; 18; 19; 24; 25; 26; 27).

Findings as presented in this study, but not supported by previous research, are skills such as observation, advice and analysis. However, these may fall within the scope of professional behaviours, which the existing studies describe as an added value. What is remarkable in findings from existing research, is that they describe added values of the OT as being able to conduct task analysis and modifications (24; 25; 26; 27). Within this research, this added value has been indicated as a weakness because the results of the interviews and document analysis show that this part is not present within the curricula of Flemish OT programs.

4.3.4. Integration of OT in prevention and H &W (labour sector)

Previous research confirms the main finding of this study, which is that the OT can have a place within specialised staff regarding prevention and H & W in the labour sector (7; 18; 19; 24; 25; 26; 27). Participants in this study, indicated that not enough attention was paid to prevention within their training. As a result, fewer OTs find their way in this domain. Recommendations from this research therefore suggest that prevention and labour should be made more visible within the training, in order to promote this employment opportunity among OTs.

These recommendations are supported by previous research. Most studies are focused on OTs within the curative sector of labour (18; 19; 24; 25; 26), and few are focused on the possible role within prevention (7; 27). These studies indicate that further research is needed on the role of the OT within the preventive sector of labour, in line with the recommendations made in this research.

A final recommendation made in this research whereby the OT should have more opportunities for specialisation within his bachelor's program, is not supported within existing research. However, the specificity and complexity of this study should be taken into account which can influence the comparison with other research.

4.4. Recommendations for follow-up research and the clinical practice

Based on the findings from this study, suggestions are made for future research. First of all, when this study is repeated with a similar methodology but for example in a different setting, the sampling population should be taken into account. Occupational hygiene, as a specialisation of the PA, could not be included in this study. An improvement would be to include all the specialisations of PAs. In this way, it can be investigated whether having an OT background is of greater value within certain specialisations of the PA profession. An additional improvement would be to include the Walloon population of PAs with a prior education in OT, to get a truer picture of the Belgian situation.

Building on this research, future studies could focus more on strengths and limitations of the PA training. In this research, limitations have been briefly mentioned by participants. Future research can focus more on this, in order to make the PA training more accessible to other (multidisciplinary) professions. In this way, the shortage on PAs can be compensated.

Secondly, further research should be done into the possible role of the OT within prevention in the Belgian labour sector. Apart from filling in the role of PA, OTs might have competences to be successful in other functions on (profit-)company level. A research design similar to this one, but with a different target group could be used. Further research into this, could better profile the OT in prevention and labour within Belgium.

Recommendations to the clinical practice have already been made, based on the comparison of results obtained from the interviews and document analysis. The first recommendation is to offer more opportunities for specialisation within the bachelor's program of OT. This recommendation was mainly made by participants of this study. They indicated different ways to achieve this, such as offering specialisation modules, guest lectures, workshops, and so on. Such content could be offered at any time within the program, although participants suggested to place this in the final year, since students will have a better overview of their interests by then. In this way, giving students a taste of different, and perhaps less obvious, employment opportunities within OT can lead to further profiling of the profession and thereby could contribute to solving the current lack of specialised staff.

A second recommendation whereby employment opportunities within labour and prevention should made more visible, is in line with the previous one. This is also mainly indicated by participants who see the possibility in offering internships, extra-curricular activities, etc. In this way, OT students are given the opportunity of further development of their interests and enthusiasm in certain areas, such as prevention and labour.

However, participants did indicate the condition that students should be better prepared for this possible professional opportunity. Internships within “labour” are now offered in some educational programs in a limited number of cases. Though, participants indicated that students are often insufficiently prepared to fully develop themselves when performing these internships. Based on this, a third recommendation was made namely, to give “labour” a more prominent place within OT training programs. The participants strongly suggest presenting the course explicitly in the curriculum, instead of integrating it into another course, because this hinders its visibility. Given the growing interest and number of working OTs within the labour sector, this recommendation is of certain value.

A final recommendation is made towards the Belgian government to stimulate OT students more during their bachelor education to this employment opportunity to compensate for the shortage of PAs. Making prevention and labour more visible and reforming the OT training based on the recommendations made in this study, could lead to an increase of OTs becoming PAs. The current shortage of PAs can be seen as an opportunity for OTs to profile themselves more within prevention and labour.

5. Conclusion

This research examines whether having a prior education in OT is an added value in the practice of the PA. If so, where and how strengths of the OT pre-education occur and how any limitations can be addressed by the educational institutes or government. Results have been obtained by comparing practice-based evidence with document-based evidence. Based on this, recommendations are written for the clinical practice and future research.

An added value in knowledge gained from the previous education in OT is experienced as having biomedical knowledge, basic ergonomics, therapeutic thinking and the ability to offer confidential relationships. Strengths in having a prior education in OT when working as a PA, are having skills such as communication skills, advisory skills, observation skills, collaboration skills and analytical skills. Limitations from the preparatory training are indicated as the limited presence of courses like prevention, Belgian legislation, ergonomics and labour. The ability to conduct task analyses is not present within the bachelor's program in OT and is indicated as the main limitation.

Findings have been critically examined in function of their validity and reliability, with the selected methodology being indicated as a strength within this study and the specificity and complexity of the research objective as being main limitations. Despite limited evidence, findings from this study are largely in line with existing research.
The most remarkable contradiction is the ability to perform task analyses that is seen as an added value in international research but seems to be absent in Flemish OT training programs of this study.
Based on the results, recommendations are made to the clinical practice.

5.1. Conflict of interests

No conflict of interest is noted by the author of this study.

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7. Attachments

A. Overview of the conditions and training required for the function of PA (15)

Educational degrees / PA functions	Higher secondary education degree	Basic multidisciplinary training certificate	Bachelor's degree	Master's degree
Basic knowledge (PA level III)	40 hours of training	/	/	/
Basic multidisciplinary training	40 hours of training	120 hours of training	/	/
PA occupational safety (level II)	40 hours of training	120 hours of training	90 hours of training	/
PA occupational safety (level I)	40 hours of training	120 hours of training	90 hours of training	280 hours of training
PA occupational hygiene (level II)	40 hours of training	120 hours of training	90 hours of training	/
PA occupational hygiene (level I)	40 hours of training	120 hours of training	90 hours of training	280 hours of training
PA ergonomics (level II)	40 hours of training	120 hours of training	90 hours of training	/
PA ergonomics (level I)	40 hours of training	120 hours of training	90 hours of training	280 hours of training
PA psychosocial aspects (level II)	40 hours of training	120 hours of training	90 hours of training	/
PA psychosocial aspects (level I)	40 hours of training	120 hours of training	90 hours of training	280 hours of training

B. Official invitation

De ergotherapeut als preventieadviseur binnen bescherming en preventie op het werk.

Uitnodiging tot deelname aan thesisonderzoek naar de (eventuele) toegevoegde waarde van een vooropleiding ergotherapie, binnen het beoefenen van de functie preventieadviseur.

Preventieadviseurs nemen een belangrijke rol in binnen de interne en externe dienst voor bescherming en preventie op het werk. Ze hebben een adviserende rol tegenover werknemer en werkgever betreffende maatregelen rond welzijn op het werk. Vaak wordt de functie preventieadviseur beoefend door personen met al eerdere voltooide opleidingen binnen (para)medische beroepen. Zo zijn er verschillende preventieadviseurs met een vooropleiding verpleegkunde, kinésitherapie, ergotherapie enzovoort. Ergotherapeuten vormen tot op heden hier maar een kleine groep in, al wijst literatuur uit dat ergotherapeuten hier een toegevoegde waarde in kunnen hebben vanwege hun holistische visie, hun kennis rond gezondheid en gerelateerde aandoeningen, en hun communicatievaardigheden. Dit alles vormt de basis voor dit thesisonderzoek.

Doel van dit onderzoek

In dit onderzoek wordt er nagegaan of het gevolgd hebben van een vooropleiding ergotherapie, een toegevoegde waarde is binnen het beoefenen van de functie preventieadviseur niveau 2. Dit door middel van diepte-interviews. Hierna wordt er een vergelijking gemaakt tussen de opleidingen ergotherapie en preventieadviseur in termen van doelstellingen en competenties. Deze gegevens leveren de basis voor een inventarisatie van voor- en/of nadelen van een achtergrondopleiding ergotherapie binnen de functie preventieadviseur.

Wie is kandidaat voor deelname aan dit onderzoek?

Gebaseerd op voorafgaande contacten in de sector wordt verwacht dat een tiental participanten gerekruteerd kunnen worden. De participanten voldoen aan deze inclusiecriteria:

- Het hebben van een diploma ergotherapie (bachelor niveau).
- Het beoefenen van de functie preventieadviseur (erkenning door de overheid; niveau 2).

Wat wordt er van u verwacht?

Na akkoord tot deelname, bent u bereid om tijdens een interview te vertellen hoe u uw ervaring ziet als ergotherapeut binnen uw huidig functioneren als preventieadviseur. Het interview zal plaatsvinden op een moment en locatie naar uw keuze en zal ongeveer één à twee uur duren.

Privacy en deelname

Het interview zal worden opgenomen met een audiorecorder. Bij het begin van dit interview zal een geïnformeerd toestemmingsformulier overlopen, en na akkooord, ondertekend worden. Uw gegevens worden beschermd bewaard op de gesloten server van de universiteit Gent. Uw deelname aan dit onderzoek is volledig vrijwillig. U kunt zich op ieder moment uit het onderzoek terugtrekken zonder hiervoor een reden te moeten geven. U ontvangt geen financiële vergoeding voor deelname aan dit onderzoek.

Ethische richtlijnen

Dit onderzoek werd goedgekeurd door de Commissie voor Medische Ethiek van de universitaire ziekenhuizen te Gent.

Indien u geïnteresseerd bent in deelname aan dit onderzoek of bij verdere vragen, aarzel niet contact op te nemen met Huyghe Arwhen (Arwhen.Huyghe@UGent.be of 0471373879).
Alvast dank voor uw interesse!
Met vriendelijke groeten
Huyghe Arwhen

C. Informed consent

Informatiebrief voor de deelnemers

Titel van de studie: De ergotherapeut als preventieadviseur binnen preventie en bescherming op het werk.

Beste,

U wordt uitgenodigd om deel te nemen aan een studie. Neem, voor u beslist deel te nemen aan deze studie, voldoende tijd om deze informatiebrief aandachtig te lezen en dit te bespreken met de onderzoeker. Neem ook de tijd om vragen te stellen indien er onduidelijkheden zijn of indien u bijkomende informatie wenst. Dit proces wordt 'informed consent' of 'geïnformeerde toestemming' genoemd. Eens u beslist heeft om deel te nemen aan de studie zal men u vragen om het toestemmingsformulier achteraan te ondertekenen.

BESCHRIJVING EN DOEL VAN DE STUDIE

Masterstudente Huyghe Arwhen voert een onderzoek uit naar de ervaren meerwaarde van een ergotherapeutische vooropleiding binnen het beoefenen van de functie preventieadviseur in de profit sector in Vlaanderen. Dit onderzoek werd opgestart wegens het hoge afwezigheidspercentage van zieken op de werkvloer. Preventieadviseurs spelen een belangrijke rol binnen welzijn op het werk om dit percentage te doen dalen. Eerder onderzoek van Ikezawa, Y., et al (2010)[1] heeft al aangetoond dat mensen met een andere multidisciplinaire vooropleiding eenzelfde mate van besluit name hebben als die van preventieadviseurs die het klassieke opleidingstraject volgen. Kinesitherapeuten, verpleegkundigen en zelfs ergotherapeuten zijn al werkzaam als preventieadviseur. Toch is er weinig bewijs van hun ervaring rond de voordelen en/of nadelen van deze multidisciplinaire vooropleidingen. Vandaar de aanzet van dit onderzoek om de ervaringen van ergotherapeuten te bevragen die werkzaam zijn als preventieadviseur binnen preventie en bescherming op het werk. Wij zouden u vriendelijk willen vragen naar uw toestemming om deel te nemen aan een diepte-interview waarbij er gevraagd zal worden naar uw ervaringen. Het interview zal opgenomen worden met een audiorecorder indien u hiermee toestemt. Alle gegevens zullen enkel en alleen gebruikt worden voor dit onderzoek. De gegevens worden beschermd bewaard op de gesloten server van de universiteit Gent. Deze studie werd vooraf goedgekeurd door een onafhankelijke Commissie voor Medische Ethiek verbonden aan het Universitair Ziekenhuis van Gent en de Universiteit Gent. De studie wordt uitgevoerd volgens de richtlijnen voor de goede klinische praktijk (ICH/GCP) en de verklaring van Helsinki opgesteld ter bescherming van mensen deelnemend aan klinische studies.
Deze verzameling van gegevens wordt uitgevoerd onder supervisie van PhD. Huget Désiron en de universiteit Gent.

[1] Ikezawa, Y., Battié, M. C., Beach, J., & Gross, D. (2010). Do clinicians working within the same context make consistent return-to-work recommendations? *Journal of Occupational Rehabilitation*, *20*(3), 367–377. https://doi.org/10.1007/s10926-010-9230-z

Toestemming en weigering

De deelname aan deze studie is volledig vrijwillig. U kunt weigeren om deel te nemen zonder dat u hiervoor een reden moet opgeven en zonder dat dit op enige wijze een invloed zal hebben op de verdere relatie met de onderzoeker.

Voordelen

Deelname aan deze studie brengt voor u geen voordeel met zich mee. De verkregen resultaten kunnen echter leiden tot nieuwe inzichten rond de meerwaarde van andere multidisciplinaire vooropleiding bij het beoefenen van de functie preventieadviseur.

Kosten

Uw deelname aan deze studie brengt geen extra kosten mee voor u, maar biedt ook geen financieel voordeel.

VERTROUWELIJKHEID

Alle informatie die tijdens deze studie verzameld wordt, zal gepseudonimiseerd worden (hierbij kan men uw gegevens nog terug koppelen naar uw persoonlijk gegevens). In het geval van pseudonimisering zal de sleutel tot deze codes enkel toegankelijk zijn voor de onderzoekende. Enkel de gepseudonimiseerde gegevens zullen gebruikt worden in alle documentatie, rapporten of publicaties over de studie. Vertrouwelijkheid van uw gegevens wordt dus steeds gegarandeerd.
Uw persoonlijke gegevens zullen verwerkt en bewaard worden gedurende minstens 20 jaar. De verwerkingsverantwoordelijke van de gegevens is de hoofdonderzoeker, Huyghe Arwhen. Haar onderzoeksteam zal toegang krijgen tot uw persoonsgegevens. De Data Protection Officer kan u desgewenst meer informatie verschaffen over de bescherming van uw persoonsgegevens. Contactgegevens: privacy@ugent.be.

Vertegenwoordigers van de opdrachtgever, auditoren, de Commissie voor Medische Ethiek en de bevoegde overheden, allen gebonden door het beroepsgeheim, hebben rechtstreeks toegang tot uw gegevens om de procedures van de studie en/of de gegevens te controleren, zonder de vertrouwelijkheid te schenden. Dit kan enkel binnen de grenzen die door de betreffende wetten zijn toegestaan. Door het toestemmingsformulier, na voorafgaande uitleg, te ondertekenen, stemt u in met deze toegang. U heeft het recht om een klacht in te dienen over hoe uw informatie wordt behandeld, bij de Belgische toezichthoudende instantie die verantwoordelijk is voor het handhaven van de wetgeving inzake gegevensbescherming:

Gegevensbeschermingsautoriteit (GBA)
Drukpersstraat 35 – 1000 Brussel
Tel. +32 2 274 48 00
e-mail: contact@apd-gba.be
Website: www.gegevensbeschermingsautoriteit.be

TOESTEMMINGSFORMULIER VOOR DE DEELNEMERS

Aankruisen door de deelnemer indien akkoord

Ik heb het document “Informatiebrief voor de deelnemers” pagina 1 tot en met 3 gelezen en begrepen en ik heb er een kopij van gekregen. Ik heb uitleg gekregen over de aard, het doel en de duur van de studie en over wat men van mij verwacht.	
Ik stem ermee in om deel te nemen aan deze studie.	
Ik begrijp dat deelname aan de studie vrijwillig is en dat ik mij op elk ogenblik uit de studie mag terugtrekken zonder een reden voor deze beslissing op te geven.	
Ik ben me ervan bewust dat deze studie werd goedgekeurd door een onafhankelijke Commissie voor Medische Ethiek verbonden aan het UZ Gent en de Universiteit Gent en dat deze studie zal uitgevoerd worden volgens de richtlijnen voor de goede klinische praktijk (ICH/GCP) en de verklaring van Helsinki, opgesteld ter bescherming van mensen deelnemend aan experimenten. Deze goedkeuring was in geen geval de aanzet om te beslissen om deel te nemen aan deze studie.	
Men heeft mij ingelicht dat zowel persoonlijke gegevens verwerkt en bewaard worden gedurende minstens 20 jaar. Ik stem hiermee in en ben op de hoogte dat ik recht heb op toegang en op verbetering van deze gegevens. Aangezien deze gegevens verwerkt worden in het kader van medisch-wetenschappelijke doeleinden, begrijp ik dat de toegang tot mijn gegevens kan uitgesteld worden tot na beëindiging van het onderzoek. Indien ik toegang wil tot mijn gegevens, zal ik mij richten tot de onderzoeker die verantwoordelijk is voor de verwerking ervan.	

Naam en voornaam van de deelnemer	Handtekening	Datum
Naam en voornaam van de onderzoeker*	Handtekening	Datum

2 kopieën dienen te worden vervolledigd. Het origineel wordt door de onderzoeker bewaard in de universiteit gedurende 20 jaar, de kopie wordt aan de deelnemer gegeven.

* Aankruisen door de onderzoeker indien akkoord

Ik verklaar de benodigde informatie inzake deze studie (de aard, het doel, en de te voorziene effecten) mondeling te hebben verstrekt evenals een exemplaar van het informatiedocument aan de deelnemer te hebben verstrekt.	
Ik bevestig dat geen enkele druk op de deelnemer is uitgeoefend om hem/haar te doen toestemmen tot deelname aan de studie en ik ben bereid om op alle eventuele bijkomende vragen te antwoorden.	

D. Overview literature review

Search terms

Prevention advisors (1)	Occupational background (2)	Work (3)	Perceived added value (4)
"occupational health" OR "occupational health consultant" OR "occupational health management"	"occupational therap*"	"work rehabilitation" OR "vocational rehabilitation" OR "return-to-work" OR "work related practice"	"perspective*"

Search strings

1 AND 2 AND 3: (("occupational health" OR "occupational health consultant" OR "occupational health management") AND ("occupational therap*") AND ("work rehabilitation" OR "vocational rehabilitation" OR "return-to-work" OR "work related practice"))

1 AND 2 AND 4: (("occupational health" OR "occupational health consultant" OR "occupational health management") AND ("occupational therap*") AND ("perspective*"))

1 AND 2 AND 3 AND 4: (("occupational health" OR "occupational health consultant" OR "occupational health management") AND ("occupational therap*") AND ("work rehabilitation" OR "vocational rehabilitation" OR "return-to-work" OR "work related practice") AND ("perspective*"))

Databases

	Medline (proquest)	Web of Science	CINAHL (ebsco)	Cochrane library	Pubmed
1 AND 2 AND 3	2 results	14 results	20 results	0 results	1 result
1 AND 2 AND 4	4 results	9 results	18 results	0 results	0 results
1 AND 2 AND 3 AND 4	0 results	4 results	5 results	0 results	0 results

Limits: 2009-2019

E. Overview document analysis

Search terms

Ergotherap* (1)	Preventieadviseur* (2)
"beroep ergotherap*" OR "bachelor ergotherap*" OR "competentie* ergotherap*" OR "beroepsprofiel ergotherap*"	"scholing* preventieadviseur*" OR "beroep preventieadviseur*" OR "competentie* preventieadviseur*" OR "specialisatie* preventieadviseur*"

Search strings

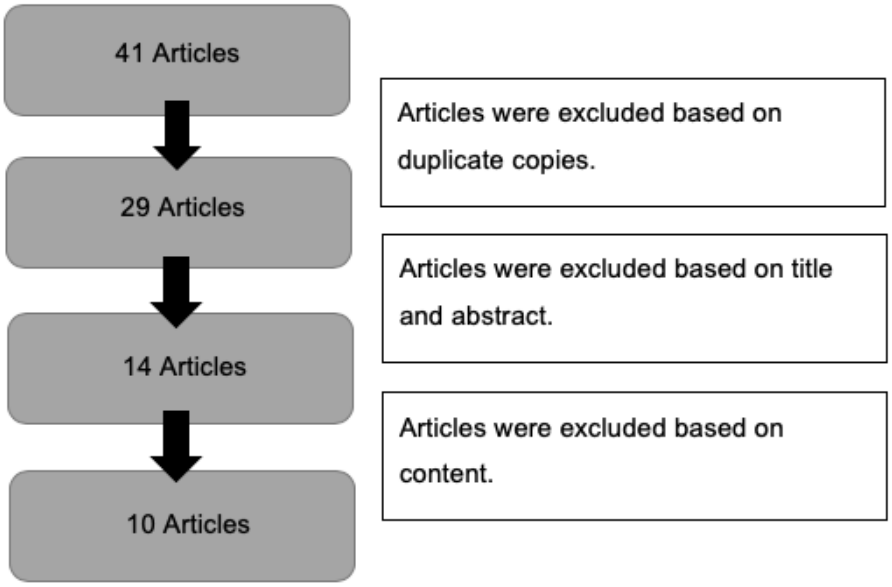
1: ("beroep ergotherap*" OR "bachelor ergotherap*" OR "competentie* ergotherap*" OR "beroepsprofiel ergotherap*")

2: ("scholing* preventieadviseur*" OR "beroep preventieadviseur*" OR "competentie* preventieadviseur*" OR "specialisatie* preventieadviseur*")

Databases and limits

	Internet (grey literature)	Limits used:
1	11 results	- Government sources - Official professional associations - Recognized educational institutions
2	8 results	

F. Flowchart literature study



G. Interview questions

- Vertelt u mij iets meer over u voltooide opleidingen na het middelbaar.
- Vertelt u mij iets meer over u opgedane werkervaringen vanaf het begin van uw loopbaancarrière tot nu.
- Kunt u kort beschrijven wat ergotherapie is voor u?
- Kunt u kort beschrijven wat een preventieadviseur is/doet?
- Zijn er volgens u raakvlakken tussen beide functies/opleidingen volgens u?
- Waarom hebt u gekozen voor deze combinatie?
- Is deze combinatie aan te raden naar andere?
- Vindt u dat er in de toekomst meer of juist minder geïnvesteerd moet worden in deze combinatie (qua overheid en opleidingen)?
- Zijn er competenties die u vanuit de opleiding ergotherapie verworven heeft en die u nu gebruikt binnen uw huidig functioneren als preventieadviseur?
- Maakt uw vooropleiding ergotherapie, u een andere preventieadviseur dan uw collega's (met andere vooropleidingen)?
- Denkt u dat er voor de ergotherapeut een toekomstige markt is binnen arbeid/welzijn op het werk?
- Heeft u nog adviezen naar de overheid en/of opleidingen toe in verband met dit onderwerp?

H. Sampling of documents and data-analyses

Documents selected	Data analysed
Wat is, wat doet een Ergotherapeut? (20)	'Onderwijskiezer' is a government project that provides cross-curricular and neutral information about the entire educational landscape in Flanders and Brussels. It provides information on the description of the occupation 'occupational therapy', its education, labor market, wages, professional sector and some useful links. *= Government source*
Competent: Jouw databank voor beroepen en competenties – fiche J140301 Ergotherapie (37)	'Competent' is a database for professions and competences at the initiative of VDAB. It provides information about the profession 'occupational therapy' and its competences. *= Government source*
Odisee Hogeschool: Ergotherapie (38)	Odisee is one of the eight university colleges offering the professional Bachelor of Occupational Therapy in Flanders. Its Campus is based in Brussels. It provides information about the profession 'occupational therapy' and its curriculum. = *Curriculum*
AP Hogeschool: Ergotherapie (39)	AP is one of the eight university colleges offering the professional Bachelor of Occupational Therapy in Flanders. Its Campus is based in Antwerp. It provides information about the profession 'occupational therapy' and its curriculum. *= Curriculum*
Thomas More Hogeschool: Ergotherapie (40)	Thomas More is one of the eight university colleges offering the professional Bachelor of Occupational Therapy in Flanders. Its Campus is based in Geel. It provides information about the profession 'occupational therapy' and its curriculum. = *Curriculum*
PXL Hogeschool: Bachelor in de Ergotherapie (41)	PXL is one of the eight university colleges offering the professional Bachelor of Occupational Therapy in Flanders. Its Campus is based in Hasselt. It provides information about the profession 'occupational therapy' and its curriculum. *= Curriculum*
Vives Hogeschool: Bachelor in de Ergotherapie (42)	Vives is one of the eight university colleges offering the professional Bachelor of Occupational Therapy in Flanders. Its Campus is based in Bruges. It provides information about the profession 'occupational therapy' and its curriculum. = *Curriculum*
Howest Hogeschool: Bachelor Ergotherapie (43)	Howest is one of the eight university colleges offering the professional Bachelor of Occupational Therapy in Flanders. Its Campus is based in Kortrijk. It provides information about the profession 'occupational therapy' and its curriculum. = *Curriculum*

Artevelde Hogeschool: Bachelor Ergotherapie (44)	Artevelde is one of the eight university colleges offering the professional Bachelor of Occupational Therapy in Flanders. Its Campus is based in Ghent. It provides information about the profession 'occupational therapy' and its curriculum. *= Curriculum*
Hogent: Ergotherapie (45)	Hogent is one of the eight university colleges offering the professional Bachelor of Occupational Therapy in Flanders. Its Campus is based in Ghent. It provides information about the profession 'occupational therapy' and its curriculum. = *Curriculum*
Beroepsprofiel Ergotherapie – Ergotherapie Vlaanderen (46)	The occupational profile of the profession 'occupational therapy' made by the Flemish professional association for occupational therapists. It provides information about the mission, vision and dimension within occupational therapy. *= Professional association*
FOD WASO: Vorming en bijscholing van de preventieadviseur (14)	FOD WASO is the Federal Public Service for Employment, Labour and Social Dialogue. It is a federal government agency responsible for the wellbeing of workers in Belgium. It provides information about the profession and training of a prevention advisor. *= Government source*
Vlaamse overheid: Welzijn en gezondheid op het werk – Preventieadviseur (47)	The Flemish government is organised as the G.D. for humanization of Labour within the FOD WASO. It is a Flemish government agency responsible for the wellbeing of workers in Belgium. t provides information about the profession and training of a prevention advisor. *= Government Source*
Competent: Jouw databank voor beroepen en competenties – fiche ISCO 08 3315 Preventieadviseur (48)	'Competent' is a database for professions and competences at the initiative of VDAB. It provides information about the profession 'prevention advisor' and its competences. *= Government source*
BeSWIC: De rol van de preventieadviseur op de werkvloer (49)	BeSWIC is a Belgian expertise center on wellbeing at work, supported by the Federal Public Service for Employment, Labour and Social Dialogue. It explains the role of a prevention advisor at the workplace. *= Government Source*

Prebes: Bijscholen & netwerken (50)	Prebes is the Royal Flemish Association for prevention and protection at work. Not only does it function as an expertise center for its members, it also provides training as a prevention advisor. The basic course provides access to become an occupational safety prevention advisor level III. In addition, there is a multidisciplinary course with the possibility to specialise in a certain professional domain to become a level II or I prevention advisor. *= Professional association*
VerV: Opleidingen Ergonomie (51)	VerV is a professional association of Flemish prevention advisors with a specialisation in ergonomics level II or I. These prevention advisors already have followed the basic course level III. It provides information about the curricula of the specialisation level II or I in ergonomics of a prevention advisor. *= Professional association*
Prevent: Preventieadviseur Psychosociale aspecten van de arbeid (52)	Prevent is an organisation who supports companies in their policies to prevention and protection at work. Prevent Academy is a part of this organisation who provides training and education. More specific the specialisation level II and I of a prevention advisor psychosocial aspect. It provides information about the curricula of the specialisation psychosocial aspects level II or I of a prevention advisor. *= Education center*
Odisee Hogeschool: Opleidingen Preventieadviseur (53)	Odisee is a University of Applied Sciences that provide six courses within prevention advisers in collaboration with KU Leuven and Prebes (and other professional associations). It provides training courses in different kinds of specialisation as a prevention advisor level II of I. *= Education center*

I. Overview of areas of knowledge and competences of the OT

Knowledge	**Competences**
• Biomedical sciences like anatomy, physiology, pathology, etc. • Social sciences like psychology, law and legislation, deontology and ethics, etc. • Occupational sciences like geriatrics, ergonomics, physical/mental/development rehabilitation, etc. • Professional reasoning like evidence-based practice, lifelong learning, interprofessional collaboration, etc. • Practical courses like (inter)national internships, projects, workshops, etc.	• Creativity • Communication • Observation • Evaluation • Analysation • Advising • Empowerment • Independent • Team player • Flexible • Coaching • Proactive

J. Overview of areas of knowledge and competences of the PA

Knowledge	**Competences**
In general • Regulations and legislation like Belgian wellbeing legislation, policies, committees, etc. • Accidents and damage claims like disability, occupational diseases, risk management- and prevention, etc. • Development of a prevention policy • Advising on occupational safety, occupational hygiene, ergonomics and psychosocial aspects (given the specialisation)	• Creativity • Communication • Observation • Evaluation • Analysation • Advising • Empowerment • Independent • Team player • Flexible • Coaching • Proactive
Specialisation in occupational safety • Risk management- and prevention like mechanical risks, electrical risks, environmental risks, etc. • Safety and health like industrial safety, safety and environment, physical and mental load, etc. • Fire risks- and safety • Risks associated with hazardous substances	
Specialisation in ergonomics • Basic knowledge of ergonomics • Manual handling of loads • Ergonomics like office ergonomics, cognitive ergonomics, organisational ergonomics, etc. • Design and posture • Environmental factors/conditions • Measurement of physical ergonomics	
Specialisation in psychosocial aspects • Psychosocial functioning and policy • Undesirable and transgressive behaviour • Stress, burnout and wellbeing • Organisation	

Another specialisation within PA, namely occupational hygiene, is not further discussed or analysed since this specialisation does not occur in the participant population and therefore no statements can be linked to it.