P2

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How mental health is incorporated in workplace strategy making



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Abstract

This research addresses the escalating discourse on mental health, particularly within workplace well-being. The surge in awareness is fueled by a significant rise in burnout-related challenges induced by workplace stressors, impacting millions according to Dutch statistics (CBS, 2020; TNO, 2019; Ministerie van Algemene Zaken, 2022). Research from Amsterdam UMC indicates that 78% of mental health work-related diagnoses are burnout-related (Amsterdam UMC, 2022). This alarming trend is reinforced by TNO's 2023 report, revealing a noteworthy increase in burnout symptoms, reaching 14% of the population. The financial impact is substantial, with annual costs surpassing 3 billion euros in the Netherlands (Ministerie van Algemene Zaken, 2023; TNO, 2023). All of these trends together highlight the urgency for organisations to find solutions. The problem statement for this thesis is as follows: Despite the startling statistics around mental health, and the acknowledged impact of mental health on organisational productivity and revenue, there is a gap in understanding how current knowledge on mental health is effectively integrated into the formulation and execution of workplace strategies in the Netherlands. Consequently, there is a need to investigate the extent to which organisational goals concerning mental health are reflected in the shaping and executions processes of workplace strategies.

This research addresses the main question of how current knowledge on mental health is integrated into shaping and implementing workplace strategies in the Netherlands. The theoretical foundation is established through a literature review exploring workplace strategy and mental health. This will be followed by an empirical research in the form of an exploratory interviews and subsequent case-studies. The gathered information and findings from these methods form a comprehensive basis for analysis of the case studies, contributing to a well-informed answer to the main research question. Objectives of this study revolve around gaining insight into the current workplace strategy processes and how the topic of mental health is incorporated in these strategies. Aiming to provide clarity on where improvements could be made.

Key words – workplace, workplace strategy, corporate real estate strategy, mental health, wellbeing

Colophon

Title How mental health is incorporated in workplace strategy making

Version P2 Report Date 24/01/2024

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1. Introduction

In recent years, the discussion surrounding mental health has gained momentum, capturing the attention of both the public and parties, particularly within the domain of workplace mental well-being (Hanc et al., 2019). This surge is closely linked to a concerning increase in people suffering from burnout-related mental health challenges induced by workplace stressors (CBS, 2020; TNO, 2019). Additionally, research conducted by Amsterdam UMC (2022), show that from all mental health work-related diagnoses, 78% were overstrain or burn-out related. Dutch statistics from 2019 revealed that 1.3 million people exhibited burnout symptoms, a number that has since risen significantly in recent years (Ministerie van Algemene Zaken, 2022). TNO's latest report in 2023 indicated a remarkable increase in burnout symptoms, this report points out that in the past decades, the number of people who suffer from burnout symptoms has balanced around an average of 10%, in recent years this has risen to 14%. Implying a significant rise which is not to be ignored according to organisational psychologist Schaufeli (TNO, 2023). Additionally, the rise in mental health issues has gained attention on national government agendas (World Health Organization: WHO, 2019).

This increase in awareness stems from the profound impact of mental health on workplace dynamics, organisational productivity, and revenues (Nientker, 2017). Studies consistently link mental health issues with absenteeism, posing financial challenges for organisations as long-term absence adversely affects revenues and overall productivity (Aarstad & Kvitastein, 2023). Recent reports from TNO, CBS, and ArboNed underscore the financial impact, with the costs of work-related stress surpassing 3 billion euros annually in the Netherlands (Ministerie van Algemene Zaken, 2023). Beyond financial implications, fostering better mental health in the workplace contributes to lower absenteeism rates, decreased costs, and positively impacts essential business goals (Muldavin, Miers, & McMackin, 2017).

While existing literature extensively links the physical workplace to health (Chadburn et al., 2017), there is a noticeable gap in understanding how knowledge on mental health integrates into the shaping processes, or strategies, of healthy workplaces. To address this gap, this thesis investigates how workplace strategies are formulated and the extent to which organisational objectives regarding mental health are effectively embedded in these processes.

The significance of this research is emphasised by the alarming statistics on burnout-related issues, with TNO revealing a substantial rise from 1.3 million to 1.6 million affected individuals within a year (TNO, 2023). The financial burden on organizations is staggering, with associated costs exceeding 3.3 billion euros annually (TNO, 2023). Costing organisations approximately €11.000 per employee. In light of these challenges, organisations are bound to address the issue not only for the well-being of their employees but also to safeguard their own interests and sustainability in the long run.

1.1 Problem statement

The compilation of these numbers and recent trends due to societal changes lead to the following problem statement:

Despite the startling statistics around mental health, and the acknowledged impact of mental health on organisational productivity and revenue, there is a gap in understanding how current knowledge on mental health is effectively integrated into the formulation and execution of workplace strategies in the Netherlands. Consequently, there is a need to investigate the extent to which organisational goals concerning mental health are reflected in the shaping and executions processes of workplace strategies.

Societal and scientific relevance

Societal changes over the past decades have changed the nature of work and the way people work, as a result organisations are more and more focused on the employee and organisational behaviour. A pervasive trend contributing to the emergence of the mental health topic in relation to organisations, is the sudden and significant shift from an industrial society to a service-based economy in the final quarter of the twentieth century (Schaufeli et al., 2009). Schaufeli et al. state that this societal change is accompanied by psychological stressors, this makes it subject to the public discussion. Leading to a growing interest in healthy work environments as good mental health is now known to contribute to the overall organisational success.

Societal

The societal relevance of this thesis lies in the impact of mental health issues, particularly burnout, on individuals and organisations. As defined by various experts, burnout, characterised by mental exhaustion, is a complex phenomenon often misinterpreted outside scientific research (Van Lier, 2024; Sahadat, 2022). Despite lower burnout statistics in the Netherlands, work-related stress affects one in five employees, with a noticeable rise over the past five years (Overspannenheid En Burn-out | Volksgezondheid En Zorg, n.d.). National research by institutions like TNO reveals a significant increase in burnout-related symptoms, costing organizations billions annually and emphasising the need for attention and intervention in the workplace (TNO, 2023). This thesis, focusing on mental health in workplace strategy, contributes to tackling this societal problem. With a plethora of literature linking the physical workplace to mental health factors, the impact of the workplace on mental health becomes clear. By researching the part that workplace strategies play in this, organisations will be able to better tackle this issue from a CRE point of view in the future, creating better work environments for users. Additionally, improving user wellbeing may also result in lowering the organisational costs related to this problem.

Scientific

The past decades show a growing awareness of the impact of the physical environment on peoples' health and well-being, both in academic research and in professional publications. The scientific relevance of examining workplace management and incorporation of mental health in corporate real estate arises from several factors. First, as previously mentioned, the topic of mental health has become increasingly relevant in today's society and organisations. Furthermore, within the research field of corporate real estate, the majority of researches revolve around CRE strategy, fewer, but still a decent number, focus on the physical aspects of the workplace and how this affects people. The literature that can be found on workplace strategy making put a lot of emphasis on creating either more efficient, more sustainable or healthier workplaces. In these researches, health is apparent, however the the topic of mental health is still very underrepresented. This is remarkable as so many organisations are affected by this issue. The topic of workplace strategy in combination with mental health holds significant scientific relevance as it examines the coming together of two elaborate research fields

which, in today's society now demands close collaboration and even integration. The topic of mental health is however more represented in adjacent scientific fields such as human resource management and naturally abundantly represented in the field of psychology. This means that a lot of knowledge on both workplace strategy, and mental health exists, yet the confluence of these fields remains underexamined. Creating insight into this confluence in practice will enrichen research on CRE strategy and most importantly, enable organisations to better understand the underlying strategy issues, this could potentially lead to new and improved approaches in practice.

1.2 Objective and research questions

The aim of this thesis research is to close the knowledge gap on how these two topics come together in practice, examining how mental health is actually incorporated in workplace strategy making. This will be tackled by gaining insight into the shaping process of workplaces by organisations who aspire to create environments which benefit employee mental health. By looking into their workplace strategies and subsequently examining how the topic of mental health is embedded into these shaping processes, an attempt can be made at closing this knowledge gap.



Figure 1.1 Role of MH in WP strategy (own figure, 2024 Figure 1.2. Incorporation of MH in WP strategy (own figure, 2024)

Potential outcomes could bring forth findings that these organisations include the topic of mental health in organisational strategies but lack efficient embedding into their translation to workplaces strategies. Or that knowledge from human resource management departments are insufficiently woven into the workplace strategy making process. From possible findings like these, a conclusion could be drawn that the topic of mental health is tackled in separate departments of organisations and not integrally included in corporate real estate strategies.

From the problem statement and objective, the following main research question and sub questions are formulated:

Main RQ:

How is present-day knowledge on mental health incorporated

in the <u>shaping and implementing</u> of <u>workplace strategies</u> in the Netherlands?

SQ1: How are workplace strategies formed?

SQ2: What are mental health factors that affect the workplace?

SQ3: What are the key factors influencing the successful implementation of workplace strategies?

To find the answer to the main research question, first foundational knowledge must be gathered on the two main topics separately, SQ1 and SQ2, through the reading of literature. After understanding how workplace strategies are made according to theory, insight will be gained into how these processes are successfully executed in practice through SQ3. This insight will provide information on how organisations go about successfully translating their organisational aims into their real estate aims. The second sub question revolves around the topic of mental health and how this relates to the workplace.

Knowledge from SQ1 and SQ3 will create an understanding of workplace strategy making, depicting subsequently "how it should go" and "how it actually goes".

The second and third research questions, SQ2 and SQ3, will later on be used to assess the extent to which knowledge on mental health is successfully implemented in the shaping and implementing of workplace strategies according to the factors emerging from the answers to these two questions.

Together, these three questions will create a foundation of knowledge, enabling to effectively analyse and synthesise data in order to answer the main research question.

1.3 Definitions

Health is the result of a complex interaction between the physiological, psychological, personal and organizational resources available to individuals and the stress placed upon them by their physical and social environment at work and home (Clements-Croome, 2018).

Well-being reflects one's feelings about oneself in relation to the world, personal feelings about motivation, competence, aspirations and degree of personal control (Jensen & Van der Voordt, 2023).

Mental health: "Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community. It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape the world we live in. Mental health is a basic human right. And it is crucial to personal, community and socio-economic development." (World Health Organization: WHO, 2022).

Corporate real estate - CRE: Corporate real estate (CRE) is the real property that a company owns or holds for the purposes of housing its operations. Multiple types of properties and facilities, including offices, warehouses, data centers and retail spaces, can be part of a corporate real estate portfolio. (Definition of Corporate Real Estate (CRE) - Gartner Finance Glossary, n.d.)

Corporate real estate management - CREM: "The management of real property assets for use in business other than real estate." (Ali et al., 2008).

Workplace - WP: "a building or room where people perform their jobs" (Cambridge Dictionary, 2024) **Workplace strategy**: "the dynamic alignment of an organization's work patterns with the work environment to enable peak performance and reduce costs" (Savage & Schriefer, 2005).

Human resources - HR: "the department of an organization that deals with finding new employees, keeping records about all the organization's employees, and helping them with any problems" (Cambridge Dictionary, 2024)

Human resources management - HRM: "is the strategic and coherent approach to the effective and efficient management of people in a company or organization such that they help their business gain a competitive advantage. It is designed to maximize employee performance in service of an employer's strategic objectives." (Johnson & Szamosi, 2018)

2. Research Design

2.1 Research Design

This research aims to explore the integration of mental health knowledge in the formulation of workplace strategies within the corporate real estate sector in the Netherlands. The research uses a variation of qualitative methods to answer the main research question. A set of sub-questions have been formulated to guide the research towards the desired outcome of answering the main research question. The research is conducted through a qualitative and exploratory methodology, gathering data to answer the research questions with the use of both theoretical and practical sources. This is done through a literature review and subsequently, the examination of multiple case studies (including document analysis and interviews). This chapter elaborates on the research design, the data collection and analysis methods, ethical considerations and the validity of the research.

"How is present-day knowledge on mental health incorporated in the shaping and implementations of workplace strategies in the Netherlands?"

SO₂ **Theoretical** What are mental health factors How are workplace strategies that affect the workplace? formed? Literature Study Literature Study SO3 What are the key factors influencing the successful implementation of workplace strategies? **Exploratory Interviews Expert interviews** Semi-structured **Empirical** Grasp strategy making in practice RQ In-depth Interviews Document analysis **Expert interviews** Internal reports Semi-structured Process evaluation documents Based on knowledge from all 3 SQ's Based on knowledge from all 3 SQ's Synthesis

Figure 1.3 Research design (own figure, 2024)

Conclusion

Theoretical research design

This research commences with a theoretical research to establish the theoretical foundation, delving into the two key concepts of the workplace strategy and mental health related to the workplace. The aim of the literature review is to deepen understanding of the key concepts and to answer the two first research questions, but most importantly the aim is to utilise this knowledge in the assessments of the cases in the empirical part later on in the research. These insights are crucial for the subsequent analysis of case studies. By acquiring knowledge about strategy making on one hand, and mental health with regards to the workplace on the other hand, the analysis and synthesis of the case studies can be conducted in a well-informed manner, leading to qualitative and valid outcomes.

In the literature review, the aim is to find answers to the following research questions:

SQ1 – How are workplace strategies formed?

This will be researched by first providing basic knowledge on the workplace, by looking into the origin and the operating context of this concept. This will be followed by literature on strategy making theories. With this knowledge, an understanding is formed about the driving forces behind the shaping of workplace strategies. This literature will provide reference frameworks from scientific literature which can be used for the third sub question, and later on when conducting and analysing the case studies.

SQ2 – What are mental health factors that affect the workplace?

This second research question will also serve to provide background information on mental health, specifically related to the workplace. The aim of this research is to obtain an understanding of what factors have been discussed in scientific research and have been determined as being of influence on workplace mental health. From this literature, a set of factors will be retrieved and used as keyconcepts in the analysis of the case studies and most probably also during the synthesis.

The information coming from these three sub questions will help obtaining a better understanding of the theory and practice before conducting the case studies.

Empirical research design

This research will involve qualitative case studies designed to offer extensive insights into the practices around the subject of strategy making and mental health. The choice of the case-study method is deliberate, aiming to ensure a thorough and detailed comprehension of the subject matter. This paragraph intends to elaborate on the empirical research conducted in the study, using diverse approaches such as exploratory interviews, and case studies with document analysis and in-depth interviews. The empirical research is first focused on addressing the third sub question, and subsequently, the case studies will be conducted after which the main research question can be answered. All the information from the three sub questions will come together to enable a thorough analysis and assessment of the cases.

SQ3 – What are the key factors influencing the successful implementation of workplace strategies?

After gaining knowledge on how strategies should be made, the third sub question serves to dive deeper into the actual practice. By interviewing practitioners, the first aim is to provide insight in what actually happens in comparison to what the strategy literature dictates. As previously mentioned, the second aim is to derive practical knowledge on which factors of successful implementation to take into account when conducting and analysing the cases.

Main RQ - How is present-day knowledge on mental health incorporated in the shaping and implementing of workplace strategies in the Netherlands?

Research Output

This study seeks to investigate the incorporation of mental health knowledge into workplace strategy shaping. As the current trends show, there is much room for improvement of mental health related issues in the corporate domain in the Netherlands. Therefor this thesis strives to map current strategy shaping processes and to identify where, and in which manner mental health knowledge is included in this process. The findings of this study offer a comprehensive insight into practitioner's strategy making processes and subsequently identifies the areas where the mental health aspect have either been applied successfully, or insufficiently. The research specifically concentrates on mental health aspects which are related the workplace, as retrieved from literature. Considering the substantial challenge posed by mental health consequences for organisations, the primary focus is directed towards corporate real estate and the formulation of workplace strategies derived from organisational strategies designed to enhance user conditions.

2.2 Research Methods

This research utilises various research methods, each requiring distinct methodologies for collecting the data. The relationship between these research methods and their corresponding data collection methods is depicted in Table X, further linking them to the specific outputs, particularly in connection with the sub-questions. Below, further information is given on the approach to each research method in accordance with the designed sequence.

Type of research	Research method	Amount	Output
Theoretical	Literature study	Depends on resource	SQ1
research		availability and quality	SQ2
Empirical	Exploratory	Depends on quality	SQ3
research	interviews		
Empirical	Document analysis	2 or 3 case studies	MRQ
research			
Empirical	In-depth expert	Depends on	MRQ
research	interviews	availability,	
		aim for approximately	
		3 per case	



Table 1. Research method overview (by author, 2024)

Figure 2.1 Simplified Research Design (own figure, 2024)

Literature study

The main resources used to obtain literature for the theoretical research are TU Library, Google Scholar, and Scopus. The types of sources are mainly academic journals and articles, literature reviews, research books published by scholars, professional publications, and statistical research published by reputable sources; nationally renowned institutions. When selecting these sources, the focus was mainly on two aspects. Firstly, the selection happened based on the amount of citations, this in order to ensure reliability. Secondly, selection happened through detecting the use of these specific sources in other reliable scientific documents made by scholars, this was done to increase validity and quality. To arrive at a decent amount of relevant publications, a lot of filtering was necessary. The filtering included reading abstracts and conclusions, searching for related literature, checking relevance and eliminating publications which did not complement the assembled relevant literature. In some cases, newspaper articles were also used to underscore the trends and relevance.

Case study selection

The choice of cases is made using project databases supplied by Brink and through exploratory interviews with Brink employees. These exploratory interviews aid in gaining insight into potential projects. After this, emphasis will be placed on identifying suitable projects by considering their nature, focus areas, relevance to the research topic, and other internal information provided in the exploratory interviews.

The selection of cases will depend on multiple characteristics derived from the main concepts in the problem statement and the information retrieved from the exploratory interviews. Firstly, cases will be filtered based on the domain in which the projects take place, the projects must be in the domain of corporate real estate and more specifically, the workplace. Secondly, nature of the project should revolve around accommodation advisory and the occurrence of CRE strategy making or implementing is imperative. Furthermore, it would be wishful to examine projects where organisations express a focus on the user and/or the aspect of mental health, either in their organisational strategy and/or CRE strategy. Lastly, as this research will be conducted under the supervision of Brink, the cases will be selected from their past, or current projects. Once an overview is created based on these selection criteria, two or three most suitable case studies will be selected to examine within the empirical part of this research. If the amount of suitable cases is higher than expected, these cases will serve as back-up cases if the initially chosen cases provide inconclusive results. Project data is gathered using documentation provided by Brink or their clients.

Case studies

The practical aspect of the research involves a holistic multiple-case method, which is a research approach facilitating a thorough examination of various cases within a given research topic (Fellows & Liu, 2015). Data collection techniques within case-studies include for instance techniques such as interviewing and almost any other forms of data collection. The purpose of employing case studies is to enhance comprehension of a topic which can potentially uncover new theoretical perspectives.

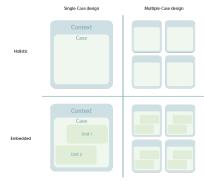


Figure 2.2 Case study types. Adapted from Yin (2009).

As for the choice case studies firstly comes forth from the fact that the research is about a topic within a specific context (CRE strategy). The context cannot be seen separately from the studied practice. Secondly, the study does not revolve around a single variable, therefor the application of a case-study method is best suited. The choice for multiple case-studies, stems from the necessity for comparison and bolstering empirical generalizability, which is a characteristic of multiple case-studies (Yin, 2009). This method will also enable to recognize patterns across various cases. The holistic aspect is based on the nature of the main research question, aiming for a comprehensive and general understanding of a complex phenomenon. Additionally, the number of cases is rather low, this further demands an indepth approach to generate an understanding. The adoption of a holistic multiple case study approach aligns with the need for a comprehensive, contextually rich, and in-depth exploration of the main research question. It provides a robust foundation for drawing meaningful conclusions, supporting theory development, and offering insights with real-world applicability (Yin, 2009).

The components of case studies will be conducted in a specific sequence. First, the information collected from the previous three sub questions will be assembled to create a checklist of topics with which the cases will be analysed. Next, an first analysis of project documents will be conducted. From this analysis, conclusions will be drawn which will help in formulating questions for the in-depth expert interviews. These interviews will serve to deepen an understanding of the projects strategy and developments. With the acquired knowledge from the in-depth interviews, a second look will be taken at the project's documents in an attempt to further develop the understanding and development of

the project. This process will be repeated as often as necessary to gain a clear overview. After gaining sufficient information, a summarising report of each case will be made. If unexpected relevant topics arise from the reports, the previously mentioned checklist can be adapted. These reports will later be used in a cross-case analysis which will attempt to detect patterns. For this cross-case analysis, the previously mentioned checklist derived from literature will also serve as a guideline of focus areas in pattern-detecting.

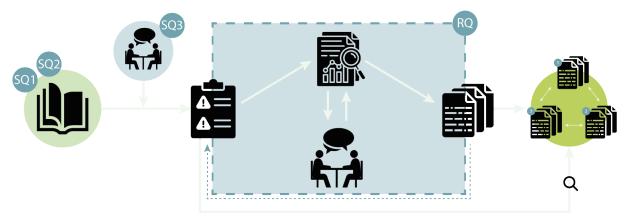


Figure 2.3 Research methods approach (own figure, 2024)

Exploratory interviews

Prior to the case study's document analysis and in-depth interviews, exploratory interviews will be conducted with employees at Brink who are involved in accommodation advisory projects. In the first place, these interviews will serve as a gateway to finding relevant projects within Brink's database. Next to this, the interviews are important as they will act as a valuable instrument for developing a more profound comprehension of the research topic in practice. In addition to this, the expectation is that topics will arise which have or have not yet been discussed in the literature. Together with the findings from the literature review, the findings from these exploratory interviews will serve as a checklist of topics for further analysis later on in the empirical part of the research. This method enables a more thorough and nuanced examination of the selected cases.

Document reading

Collecting documents will mainly depend on the availability of documentation and willingness of either Brink or their clients to share this information. When collected, these documents will be read and simultaneously analysed. This will take place in the form of desk research. Documentation may include notes during strategy making, official strategy and implementation proposals, progress reports, internal reports, evaluation reports. These documents will provide insight into the strategy making and implementation processes, organisational structures and key drivers.

In-depth interviews

After the document reading, in-depth interviews will be conducted. The selection criteria for these interviews are rather broad: All professions involved in the shaping and steering of the case-specific workplace strategy. This could include professions such as CRE-managers, FM-managers, HR-managers, consultants or even architects. It is likely that some parties will be external to Brink. The aim of these interviews is to gain an elaborate insight into the projects. To obtain further information on why the strategies were designed in a certain way and discover where the obstructs were in the projects strategy development for the workplace. To comprehend what the obstacles are to include MH factors in strategies from a practitioners' point of view. The in-depth interviews will be semi-structured with some pre-defined questions based on findings from the literature. The choice for semi-structured interviews is based on creating flexibility to uncover new topics. The aim of the in-depth interviews is to collect professional perspectives in order to detect crucial factors, and potential opportunities.

2.3 Data Analysis

As mentioned in the data collection paragraph, this research consists of multiple types of research methods and data. The use of various methods and data point towards an application of a **combined analysis method**. This integrated approach is characterised by Bouncken et al. (2021), as flexible-pattern matching, in which are patterns derived from theories are formulated either before the start of data collection or the other way around. In this particular research, theories will be collected in the theoretical research, and the data will gathered in the empirical research part. The combined analysis method thus brings theory and practice together in the analysis.

To start with, it is important distinct the various levels at which analysis will take place. The theoretical data on the main subjects: workplace strategy and mental health, stems from the literature review, which will be analyser with the content analysis method (Stemler, 2015). From this literature frameworks and other important aspects will be retrieved and used for the reading of documents and pattern matching with the empirical data. The first empirical data will come from the exploratory interviews. The second from document readings, to these readings the thematic analysis method will be applied (Clarke & Braun, 2016). The last from the in-depth interviews. These three data sources will all provide information about the same subject.

Furthermore, as previously mentioned, reports will be drawn up for each case. These case-reports will then by analysed through a cross-case analysis. This research method involves comparing and contrasting information or findings across multiple cases or instances within a study. The aim of this method is to examine similarities and differences among various cases to identify patterns, themes, or insights that can contribute to a broader understanding of the research question or phenomenon under investigation (Cousins & Bourgeois, 2014). The use of this method will enable to draw meaningful conclusions that go beyond the individual cases.

Lastly, when conducting the cross-case analyses, the Gioia data analysis method will be used to detect patterns between the cases. The Gioia approach often referenced in the domain of business and organisational studies. This methodology starts by delving into the data, identifying patterns organically through a bottom-up approach to partial pattern matching. Importantly, it does not commence with a pre-established theoretical framework, positioning itself as fundamentally driven by data in the realm of qualitative research (Bouncken et al., 2021). This methodology excels at delivering profound and comprehensive theoretical insights into the contexts of organisations and its practices. It reveals the interconnections between emerging concepts that either depict or clarify the researched context. Furthermore, it aids to establish links between data and theory (Gioia et al., 2013). Hence, this thesis employs the Gioia method for detailed inspection, analysis and interpreting of data from the diverse case studies.

2.4 Limitations

While a holistic multiple-case research approach and combined analysis methods may offer valuable insights, it is essential to acknowledge potential limitations. Below a list of limitations is given.

- Limited Generalisability: The findings from a small number of case studies may have limited generalizability to broader populations or contexts. The specificity of the cases and the data provided by Brink or its clients may not be representative of larger trends in the industry.
- Potential Bias in Data Sources: Relying solely on data provided by Brink or its clients may
 introduce bias, as these sources might have vested interests or may not provide a complete
 picture. Lack of independence in data sources could affect the objectivity and validity of the
 research.
- Time Constraints: Conducting comprehensive holistic multiple-case research, including exploratory interviews, in-depth expert interviews, and documentation analysis, within a three-month timeframe can be challenging. Time constraints may limit the depth of data collection and analysis, potentially impacting the richness and completeness of the findings.
- Limited External Validity: The research's external validity may be constrained due to the specific nature of the cases and the industry context. Findings may not be easily transferable to other industries or settings, limiting the broader applicability of the results.
- Potential for Selection Bias: The choice of cases may be influenced by the company or its clients, leading to a potential selection bias. Cases chosen may not be entirely representative of all possible variations within the broader population, impacting the research's external validity.
- Dependence on Company Cooperation: The success of the research depends on the company's cooperation and the availability of relevant data. Limited access to information or reluctance to share sensitive details may hinder the completeness and depth of the study.

2.5 Ethical considerations

By addressing these ethical considerations, the research can be conducted with integrity, respect for participants, and a commitment to the responsible handling of data. Based on the chosen subject and methods, several ethical considerations arise, these are:

- Informed Consent: Obtain informed consent from all participants, ensuring they fully understand the purpose, procedures, potential risks, and benefits of their involvement in the study. Clearly communicate the voluntary nature of participation and the right to withdraw at any point.
- Confidentiality and Anonymity: Assure participants of the confidentiality of their responses and anonymize data to protect their identity. Clearly communicate the measures taken to safeguard their privacy and ensure that no sensitive information will be disclosed without explicit consent
- Transparency in Data Collection: Clearly communicate the methods and procedures of data collection to participants, including the nature of interviews, the purpose of documentation analysis, and how their data will be utilized. This transparency fosters trust and understanding.
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3. Literature Review

3.1 Workplace

In order to comprehend how workplace strategy comes about, one must first understand the significance of the workplace in today's society and how the workplace operates. Secondly, literature on strategy making is discussed

Workplace management introduction

Workplace management is a topic which is thoroughly researched in multiple fields, though it is not known as an academic discipline in and of itself. The researching fields are psychology, medical sciences, organisational management sciences, engineering sciences, economics and architecture. Each field observing the phenomenon from different perspectives and approaches the subject with their respective theoretical background to research and assess the processes behind successful management. These different fields and approaches naturally entail different considerations and relationships compared to the other fields. This stratification regrettably leads to knowledge on this topic being scattered and essentially lost between these fields, without often coming together. According to Davinska and Appel-Meulenbroek (2022), "workplace management has been scattered across different disciplines for a long time, especially the physical versus the psychosocial environment". This statement clearly states a knowledge gap on how these two topics come together, both in theory as in reality.

In order to create a well-functioning symbiosis between the fields it is important to understand how some of these fields integrate their knowlegde towards healthier workplaces.

Origins and context of WP management

"Workplace management, in one form or another, has been around since the first buildings dedicated to performing work-related tasks appeared" (Danivska & Appel-Meulenbroek, 2021). Indicating that this practice has been around for a long time. Yet around the end of the 19th century, as a result of the industrial revolution, the segment of office buildings has seen a sudden and astronomical surge. It is in these times that the notion of the workplace emerged and people began to research and shape the field of the workplace in an aim to optimise work production. This research field was led and dominated by Frederick Winslow Taylor. A founding name in the research field of management.

A second development of workplace management happened when specific roles were appointed to manage the physical workplace, this happened around the 1950's. This indicates that the notion emerged that the workplace needed a form of constant assessment and managing. Presumably as a result of the economic growth in the years following the war. In these days the focus still lied on productivity in terms of work-efficiency and return optimisation.

In the 1980s, the demand to manage operations scattered across various locations gave rise to a new approach in research, known as facilities management (FM). Short thereafter, the concept of corporate real estate was formulated by Joroff et al. (1993). This in turn led to a new management domain: Corporate real estate management (CREM). Where FM focusses on the operational level of building management, CREM approaches it from a broader scope and financial perspective.

Now when did the users appear on the research-scape of workplace management? From rather early on, already in the first half of the twentieth century, research within organisations were developing and continuously expanding knowledge on behaviour in the work environment. The starting point of this was the introduction of the concept that work performance is closely tied to humans and their interactions on the work floor. Another aspect that was then known, is that physical environment also forms human behaviour and interactions. Showing a relationship between the users, their work

environment and performance. Building forth on this concept, the research field of human relations (HR) arose, focussing on humans, their relationships and behaviour within the work environment.

In the last decennium of the twentieth century, a new trend emerged. This one focusing on the relationship between the workplace environment and the users' needs. This is where the interest for alignment of the workplace to employees' needs came to light. In 1991, a team of researchers from the Industrial Development Research Foundation (IDRF) brought to life a project named Corporate Real Estate 2000. This project was led by Joroff and aimed to research how activities and changes within business environments create new demands that require actions or response from real estate services and their suppliers. This report a pivotal role in reshaping corporate leaders' perspectives on the concept 'workplace' and their perception of the 'value' associated with the real estate in their portfolio's (Joroff & Becker, 2016).

The foundation of contemporary perspectives on the workplace began taking shape towards the end of the 1980s, researchers started investigating the activities and dynamics of people, and between people on the work floor. Their researches brought to light and emphasised the importance of interplay between the workplace design, management of workspaces and the actual execution of work practices. As a result, an understanding of workplace strategies and related management policies emerged to support these work practices. The policies were specifically formed based on the nature of the task and the individuals involved, the accessibility of certain tools, and the organisational culture.

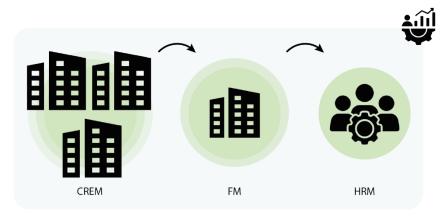


Figure 3.1 Scales of CRE (own figure, 2024)

From literature on the origins of the workplace concept and research field, it becomes clear that the workplace tied to a bigger structure of corporate buildings and operations. The literature points out several scales of CRE to which the workplace is related, these are depicted in figure 3.1. So where does the workplace fall into this list?

Workplace management within the context of organisations

The definition of workplace management is not one that is clearly defined and widely adopted by researchers within the field of management. Throughout the years attempts have been made to grasp the concept within a definition such as the one mentioned in the first part of this paragraph. In the work field workplace management is generally perceived as a responsibility falling under the purview of facility management (FM), corporate real estate management (CREM), or human resource management (HRM) departments (Danivska & Appel-Meulenbroek, 2021).

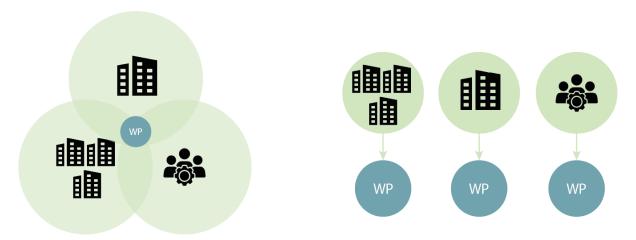


Figure 3.2 WP in between 3 domains (own figure)

Figure 3.3 WP in the organisational context (own figure, 2024)

In many organisations, the oversight of workplace management falls under the umbrella of one of these three departments, as depicted in figure 3.3. Although according to Redlein et al. (2020), workplace management is more than that and requires a combined expertise of multiple fields such as CREM, FM, HRM, marketing, finance, IT, organisational head figures and employees. Redlein states this is necessary in order to create a healthy and effective workplace for both organisations and employees.



Figure 3.4 WP in the organisational context by Redlein (own figure, 2024)

What do organisations use CREM strategy for

"the management of a corporation's real estate portfolio by aligning the portfolio and services to the needs of the core business, in order to obtain maximum added value for the business and to contribute optimally to the overall performance of the corporation." (Dewulf et al., 2000)

In this context, management includes strategic, tactical and operational management of real estate assets of these specific portfolio's.

System-thinking

System thinking is a way of thinking that is often used in organisational atmospheres. It is primarily used as a tool to create a structural overview of complex systemic issues. These overviews are used as a supporting tool or even as a language when discussing these complex systems. The essence of system-thinking is to enable professionals to observe projects as a whole. This tool is often used to bring professionals with different backgrounds together. However, professionals with diverse specialised backgrounds are naturally inclined to using the language of their respective subject terminology. This inclination establishes a significant barrier when attempting to apply this language in complex, multidisciplinary projects (Thakore et al., 2021). This method of thinking is often used in decision making at organisational levels.

This way of thinking is about bringing conscious structure and organisational insight to intangible processes (Arnold & Wade, 2015). A system consists of elements with possible interconnectedness, these are called system-components. System components can be anything, human and non-human. Inherently, system-components contribute to the functioning of the particular system, such contributions can for example be drivers, outcomes or feedbacks (Cerar, 2012). At its essence, the concept of systems-thinking revolves around the notion of the 'adaptive whole.' When viewed as a unified body, a system holds distinctive properties, a structured hierarchy, and communication and control processes.

As a foundation, System-thinking holds five basic principles (Anderson & Johnson, 1997). Each principle is also viewed as autonomous disciplines within system-thinking. These are:

- 1. The 'Big picture' principle necessitates broadening one's outlook to discover more effective solutions. For instance, during challenging times, individuals often focus on the immediate, most urgent problem, which only results in changes elsewhere in the system. Hence, it is important to step back to examine the broader context, and explore the origin of the problem, as this is more likely to lead to a more effective solution.
- 2. The 'Long Term, Short Term' principle proposes that achieving a harmonious decision involves considering both short-term and long-term perspectives. The optimal course of action is one that includes both dimensions.
- 3. The 'Dynamic, Complex, and Interdependent' principle underscores constant change, the recurring presence of chaos, and the interconnectedness of everything. It emphasizes that the world is dynamic, complex, and interdependent. This principle argues against relying only on simplification, structure, and linear thinking, recognizing their limitations. Instead, it urges considering a system's relationships, both within the system itself and with the external environment.
- 4. The 'Measurable vs non-measurable' principle urges organisations to value both quantitative and qualitative data. It challenges the tendency to only prioritise what can be measured.
- 5. The 'We are part of the system' principle underscores that decision-makers often implicitly are contributor to problems within the system. Current challenges may result from unintended consequences of previous decisions or solutions, including choices made based on assumptions, values, and beliefs.

As previously mentioned, these systems are often used in organisations for mapping complex projects and processes. These systems often include strategic processes among other elements and processes.

The mechanisms within systems are interdependent. This means that the successes of strategic outputs depend on effective coordination between other mechanisms. For example, actors within strategic systems will undertake actions influenced or imposed by strategic governing rules prior in the system, when in accordance with these pre-defined rules, desired strategic outputs are obtained. This makes it of relevance to strategy making. As system are completely interdependable, positive strategic outcomes influence the rest of the system. Resulting in risk-reduction when managed and executed effectively. However on the other hand, negative strategic outputs have the power create uncertainties of the rest of the system, these uncertainties are called "challenges". Therefore, iterative engagement with these processes could improve capacities for managing challenges and understanding the "complexity" in the system.

Strategic Alignment at the workplace

Alignment theory in organizational contexts focuses on the seamless coordination of different elements such as goals, strategies, and processes, to work towards a common objective. This theory underscores the significance of coherence and integration within an organization, where elements align to support overarching goals. In essence, alignment theory is a strategic approach used by organisations to streamline their internal functions, enhance efficiency, and foster a cohesive direction. It is commonly applied to optimise organisational performance and ensure that all aspects work synergistically towards common goals, often shaped by the company. Strategic alignment is "the link between an organisation's overall goals and the goals of each of the units that contribute to the success of those overall goals" (Andolsen. 2007). Alignment is often approached from either one of the three following perspectives: process, relational, or strategic (Arkesteijn & Heywood, 2021). Moreover, organisational alignment can be categorised into five distinct types: horizontal alignment, vertical alignment, structural alignment, cultural alignment, and environment alignment (Alagaraja et al., 2015).

For corporate real estate and workplace, the alignment questions relate to the organisation's physical environments and their management. In Strategy Safari, by Mintzberg et al. (1998), several schools of strategy making are identified. From these schools of thought, two are often applied in CRE and WP alignment. These are the Design and Positioning schools, both "prescribing" strategies, focussing on the ideal processes and contents for strategies (Arkesteijn & Heywood, 2021).

The Design School of strategy, formed in 1957 by Harvard teachers, aims to match a company's strengths and weaknesses with outside opportunities and threats (SWOT). Mintzberg states that despite its simplicity and ease of use, it has become a somewhat ritualistic and overused approach, deviating from its intent to strategically detect a 'fit', to a more generic way of thinking (Mintzberg et al., 1998).

The Design School's revolves around congruence, distinctive competence, competitive advantage, SWOT, formulation, and implementation. The processes are ordered, and leadership is dominant. However, it has issues, like not everyone agreeing on SWOTs and sometimes overrating strengths and opportunities. The Balanced Scorecard (BSC), associated with the Design School, complements this approach by emphasizing the evaluation of both external and internal situations. Created by Kaplan and Norton (1996), the BSC checks financial, customer, internal process, and innovation areas, aligning strengths and weaknesses with opportunities and threats for a complete strategic approach.

All in all, in the Design School 'alignment' is sought between strengths and weaknesses and the opportunities and threats, or among the four dimensions: financial, customer, internal process, and innovation (Arkesteijn & Heywood, 2021).

The Positioning School views strategy formation as an analytical challenge, rooted in Porter's work originating from economics and industrial organization theory. It focuses on how a company can position itself within its industry. The analysis involves external factors and internal factors.

- External to the organisation and expressed as five industry forces: buyers, suppliers, new entrants, substitutes, and rivalry between industry firms (Porter, 1980).
- Internal to the firm, concerning the value-enhancing activities of its internal organizational functions such as logistics, marketing, and firm infrastructure (Porter, 1985).

The outcomes are three 'generic' strategies: cost leadership, differentiation, and focus. These strategies aim to achieve Sustainable Competitive Advantage. The school assumes that top management analyses the industry and determines the strategy, which is then implemented at lower organizational levels. The process is analytical and systematic, with leadership responding to the analysis. The school's context is simple, stable, and mature, and the organizational form leans towards a large, centralized machine, particularly in commodity or mass production.

Alignment theory holds significant importance in workplace research as it aims to generate improved and effective CRE structures that function optimally from the start. This involves aligning these structures with the organisation's aims and ensuring their strategic resilience for long-term efficiency. Workplace alignment is considered a component of CRE alignment, given that alignment takes place at various organizational levels and is interconnected (Arkesteijn & Heywood, 2021).

Throughout the past thirty years, a lot of research has been done on strategic alignment in CRE. From these researches fourteen base-models have been formed, these have been mapped and studied by Arkesteijn and Heywood (2017). This study concluded that CRE alignment is a complex and pluralistic process. It cannot be described as a singular, definitive "thing" but rather a set of four stages named "building blocks" with twelve components and internal feedback loops. One of these four blocks revolving around CRE or WP strategy making.

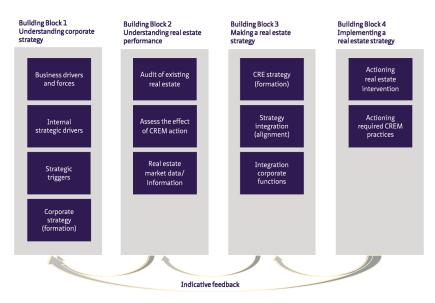


Figure 3.5 CRE alignment components. (Arkesteijn & Heywood, 2021)

The CREM Map (Kämpf-Dern & Pfnür, 2014)

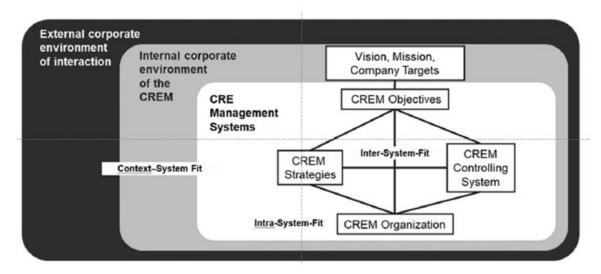


Figure 3.6 CREM Map (Kämpf-Dern & Pfnür, 2014)

Three strategic phases of workplace decisions (Tagliaro & Ying, 2021)

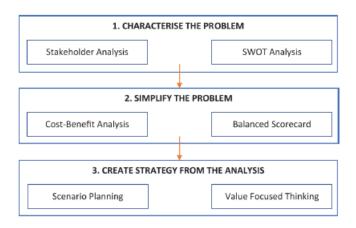


Figure 3.7 CREM Map (Tagliaro & Ying, 2021)

Strategy development

In the beginning of the millennium, a research team was asked to develop a maturity model of how CREM change-strategy. Organisational maturity means the degree to which an organisations has explicitly and consistently implemented documented, managed, measured, controlled, and continuously enhanced practices or procedures is a measure of organizational process maturity, which can be assessed through a process appraisal (*What Is Organizational Maturity | IGI Global*, n.d.). So this illustration provides a first generic draft on the stages CREM strategy-creating.

This maturity model breaks the process down into five stages. Each stage building forth on the previous, increasing in complexity and adding value to the real estate in their own respects.

- 1. Taskmaster: Fulfils the company's demand for physical space in accordance with requests.
- 2. Controller: Addresses the imperative for senior management to enhance comprehension and minimize costs associated with real estate.
- 3. Dealmakers: Resolves challenges in real estate through methods that generate fiscal value for the various business units.

- 4. Intrapreneurs: Functions internally as a real estate entity, suggesting alternatives aligned with competitors' real estate strategies to the business units.
- 5. Business strategists: Anticipates evolving business trends, gauges their impacts, and contributes to the holistic values of the corporation by focusing on the company's mission rather than fixating solely on real estate.

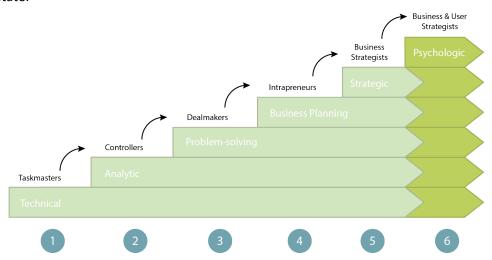


Figure 3.8 Organisational Maturity model (Hoendervanger et al., 2017)

As seen in the figure, an expanding, sixth stage is proposed by Hoendervanger et al. (2017). Design and management of workplaces throughout the five stages, Hoendervanger even proposes adding a sixth stage which includes the end-user. In this sixth stage, among other ideas, the idea to include psychological knowledge in processes is suggested, as well as end-user participation in design and management processes. According to Hoendervanger et al., this would add value by enhancing

the employee circumstances such as wellbeing and productivity.

The proposal for this sixth stage originates from three great societal changes in the last decade of the twentieth century. <u>Firstly</u> the emergence of IT in the corporate landscape created a shift towards new practices such as blended working and *activity-based working* as the global new norm (Van Meel, 2019), changing the need for a fixed work environment.

<u>Secondly</u>, organisational behaviour is increasingly based at the centre of corporate strategy implementation. The reason for this is that desired business outcomes are increasingly dependent on workplace behaviour, especially in knowledge-based organisations. This is why the attention for healthy work environments is also receiving growing attention.

Thirdly, since the beginning of this century a new trend has occurred named 'the war on talent' (Beechler & Woodward, 2009). This so-called war is a product of the knowledge industry. Due to the high demand of talent, organisations compete in order to make their companies the most attractive in terms of work conditions. The consequences being that workers are being encouraged to follow their personal preferences in terms of work environment and practices. Organisations can no longer take risks when it comes to proposing even slightly unattractive working environments. It can be said that the optimisation of work environments has recently become a focal point for CREM practices (Leesma, 2019).

Relevance to CRE strategy

Enexis

In 2009, Enexis adopted the CREM Maturity model and incoporated the value propositions by Treacy and Wiersema (1993). By linking additional end-user related aspects to each of the five original stages, Enexis enabled a 22% reduction in their CRE square-footage and a 18% increase in employee number.

This resulted in a 37% reduction of rented space per fulltime employee, all by incorporating this user-centered approach into their CREM strategy.

BBC

In 1998, the British Broadcasting Company (BBC) made their CRE strategy for the upcoming 20 years riven by their corresponding organisational vision. For this, the CREM Maturity model was also used with two of the five key drivers focussing on end-users. For the shaping and execution of this CRE strategy, the BBC's CRE department worked in close partnership with the HR and IT departments. Since the adoption of this strategy, the BBC has reduced 40% of their footprint and the annual savings in property expenditure are estimated at 47 million pounds.

3.2 The workplace and mental health

Introduction

In order to understand the current trend of mental health in organisations, it is important to first create a better understanding of the concept of mental health in general, and in relation to the workplace.

According to the World Health Organization, health is described as a condition of overall physical, mental, and social well-being, rather than just the absence of illness or weakness (World Health Organization: WHO, 2022). In the past, the term mental health was often by default connotated to mental disorders. Multiple studies, such as a study by Vaingankar et al. (2020), have shown strong correlations between poor mental health and these types of disorders. However in recent days mental health is no longer necessarily mentioned in relation to mental disorders. Mental health conditions are perceived as a complex continuum of varying mental states which can for example include psychological distress and impairment in functioning (World Health Organization: WHO, 2022). This implies that poor mental health is not an issue which solely applies to people with mental disorder diagnoses, its scope is much broader.

There are just as many definitions of burnout as there are burnout coaches, burnout books, psychologists, stress experts, and occupational experts (Van Lier, 2024). According to Van Lier (2024), from all these definitions, all sources agree on one thing: the core of burnout is mental exhaustion. The term is derived from the most widely used definition of burnout, that of the American psychology professor Christina Maslach (1981).

Psychologist Christiaan Vinkers states that the term is well-known but often definitions are used which do not align with scientific research (Sahadat, 2022). Vinkers continues by saying that in the context of burnout, one refers to a situation where an individual has undergone prolonged and excessive stress, causing an imbalance between the overwhelmed body and mind. Nevertheless, the term is employed variably by different individuals, from mild to severe issues and a wide range of symptoms. Vinkers argues that it is extremely difficult to diagnose burnouts as the symptoms correspond with symptoms of depression and anxiety disorders.

Naturally burnout is not the most prevalent mental health issue at is it often considered to be the utmost form of stress-related work conditions. Yet, research conducted by Amsterdam UMC (2022), show that from all mental health work-related diagnoses, 78% were overstrain or burn-out related.

Prevalence and consequences

Impact on employee wellbeing

The main consequences involve stress, physical issues, absenteeism, reduced productivity (TNO, 2023). Multiple sources mention that if the stress is continuous, particularly in older or less healthy individuals, the long-term effects of stressors can seriously harm health. Recurring terms in literature

regarding the effects of stress consist of anxiety, functional impairment and depression. Sometimes, in exceptional cases, effects of long-term stress can even develop into a variety of mental health disorders such as anxiety and depression (Breslau et al., 1995). Next to mental health repercussions, long-term stress can also cause physical health issues. Such issues can be changes in the nervous, cardiovascular, endocrine and immune systems (Schneidermann et al., 2005). However, the reciprocity of stress on health makes it difficult to determine which event is the cause, and which the effect. Sometimes the illness is the cause for stress, whilst sometimes the stress causes the illness. According to Teasdale (2006), psychological stress is not an illness in itself; it's a state of being. Still, it can be a significant factor contributing to illness. Long-term, excessive stress is known to cause in severe health issues. Leading to potential issues such as absenteeism for employees and their employing organisation (Miraglia & Johns, 2016).

Organisational perspective

The main consequences involve reduced productivity, absenteeism, costs (TNO, 2023).

A recurring theme in the research literature is the challenging relationship between the individual and the work environment (Maslach, 2017). Meaning that the person would not be able to meet the requirements of the position offered by the organisation. The lack of skills to effectively meet the requirements may lead to outcomes such as diminished performance or absenteeism (Leiter & Maslach, 2004).

Leiter and Maslach have established a model depicting six key areas creating possible burnout or strain, and five possible consequences for both organisations and employees. This model is called the AW model. Even though this model would mainly be used in the fields of psychology or human resource, it provides a clear overview of the outcomes for both organisations and employees. Further supporting the importance of the subject of mental health to organisations.

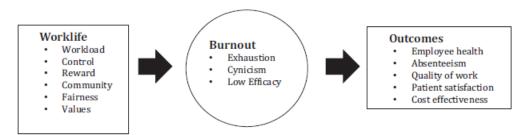


Figure 3.9 AW model (Leiter & Maslach, 2004)

Mental health factors

The determinants of mental health are diverse and multifaceted, and they can vary from one individual to another (Alegría et al., 2018). While many organisations and institutions aim to provide frameworks for these determinants, there is not one main universally or scientifically accepted framework. The main recurring distinction that can be made from the vast amount of literature, is a difference between the internal and external factors affecting mental health (Bhugra et al., 2013). Internal factors could consist of pre-existing genetic mental health disorders in people. As this research goes into the effects of mental health in a specific type of physical environment, the focus will solely be on external factors rather than internal factors.

External determinants consist of the conditions in which people are born, live, and work. According to Allen et al. (2014) these conditions are shaped by three forces: economics, social and environmental policies and politics. According to this research, differences in these three fields can lead to inequalities, creating mental health inequities. This research by Allen et al. (2014) focusses on the **social determinants of mental health**, unveiling a variety of determinants. These range from familial relationships and socio-economic minorities to poor quality environments and employment conditions.

As the literature shows, contexts in which people live and operate are related to mental health. Furthermore, mental health is directly related to general human health. Which is an important factor for organisations with respect to their employees and the functioning of the organisation itself. It can therefore be concluded that mental health is a topic of relevance for organisations.

Workplace environment and mental health

As stated in the previous paragraph, employment conditions amongst others, are a determining factor for mental health. Many researches have looked into this relationship and on many occasions negative impacts on mental health were found. According to research by Bambra et al. (2009) links can be made between positive mental health influences such as job control and decreased work load demand. These reduce stress, anxiety and depression as well as increasing productivity, job satisfaction and self-esteem. Alegría et al. (2018) further establish that a two-way relationship exists between mental health and social determinants. The literature further underscores that this reciprocal relationship also applies to the workplace as employment conditions are a part of the workplace experience.

As stated in the previous paragraph, the determinants of mental health according to research are vast, diverse and multi-facetted. Research by Kropman et al. (2022) about mental health in the workplace has brought about a wide literature review on all of these mental health determinants specifically related to the workplace. These determinants come forth from an extensive literature study on the most-mentioned mental health consequence terms linked to the physical workplace in 133 papers, all selected by Bergefurt et al. (2022). In this literature study, these terms are referred to as mental health indicators. From this research ten mental health indicators kept resurfacing, these comprised of: Burnout, engagement, depression, mood, fatigue, sleep quality, wellbeing, concentration, productivity, and stress.

Concluding from the literature study by Kropman et al. (2022), stress is one of many important components of poor mental health. Similarly to mental health, stress is viewed as an ambiguous phenomenon which is difficult to define scientifically. Throughout the years, a vast amount of literature has been written about stress in the field of psychology. In the field of psychology, Seyle's terminology of stress is often used; Seyle (1956) describes stress as the effects of anything which seriously threatens homeostasis. From Seyle's work, the general conclusion is that stress is a reaction to a disruptive cause. These disruptive causes are often referred to as stressors. Stressors have a significant impact on mood, our sense of well-being, behaviour, and health (Schneiderman et al., 2005).

A significant number of mental health issues observed in the workplace are various expressions of stress or, to be precise, conditions linked to stress. In fact, many studies have found positive associations between stress and burnout (Crawford et al., 2010; Schaufeli & Taris, 2014) and also between stress and poor health (Ganster & Rosen, 2013). When translated to the work environment, stress arises when the demands of the workplace exceeds a person's ability handle or control them (Henderson et al., 2012). Naturally, most jobs involve some degree of pressure and often such pressure can be positive. It can improve performance and give job satisfaction. However, when the pressure reaches excessive levels, and continues for some time, it can lead to mental and physical ill health (Kropman et al., 2022). Throughout the years, multiple models have been created to depict relations between stress and work-related conditions. Some of which often resurface in literature, examples of these are 'the human function curve' by Nixon (1982) and the 'conservation of resources model' by Hobfoll (1989). Nixon's model depicts the impact of work-related pressure on humans, which in the beginning pressure improves performance however at a certain point, performance deteriorates as a result of excessive pressure. Hobfoll's model depicts the influences of psychological job demands on health problems.

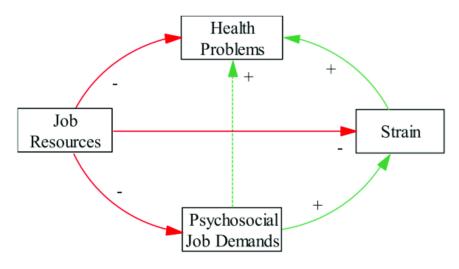


Figure 3.10 Conservation of resources model (Hobfoll, 1989)

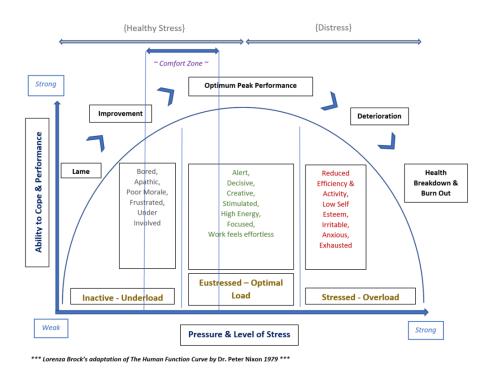


Figure 3.11 The human function curve (Nixon, 1982)

Other renowned researchers in the field of organisational psychology whose work is often referred to, are Schaufeli and Maslach. Their work predominantly revolves around workplace burnout, however in their papers, the topic of stress is also touched upon as stress often forms a foundation potentially leading to burnouts. In one of their papers Schaufeli et al. (2009) mention that the Royal Dutch Medical Association in 2000 (Van der Klink & Van Dijk, 2003) distinguished three levels of stress related disorders:

- 1. Distress (i.e. relatively mild symptoms that lead to only partly impaired occupational functioning);
- 2. Nervous breakdown (i.e. serious distress symptoms and temporal loss of occupational role);
- 3. Burnout (i.e. work-related neurasthenia and long-term loss of the occupational role).

Following this distinction in gravity of workplace stress related symptoms, Schaufeli et al. (2009) conclude that the practice guidelines recommend the use of the MBI diagnostic tool to assess all types of stress-related symptoms. The MBI diagnostic tool, or Maslach Burnout Inventory, is a widely used

diagnostic tool designed to measure burnout, particularly in the workplace. Developed by psychologists Christina Maslach and Susan E. Jackson (1981), the MBI assesses three components of burnout:

- 1. Emotional Exhaustion (EE): This component measures feelings of being emotionally drained and depleted of emotional resources. Individuals experiencing emotional exhaustion may find it challenging to cope with the demands of their job.
- 2. Depersonalization (DP): This component evaluates an individual's impersonal reaction and negative attitude towards their clients or colleagues. High depersonalization scores suggest a sense of cynicism and detachment from one's work.
- 3. Personal Accomplishment (PA): This component assesses feelings of competence and successful achievement in one's work with people. Low scores on personal accomplishment indicate a reduced sense of efficacy and successful achievement in one's work.

After the release of the Maslach Burnout Inventory (MBI) in 1981, subsequent versions of the MBI were progressively created to suit diverse groups and varied environments. In the specific case of corporate workplaces, the general MBI survey would apply (MBI-GS).

When diving into the physical work environment, only one study distinctively links mental health factors to physical interior aspects of buildings. This research is done empirically by Kropman et al., it links the previously mentioned ten mental health indicators to ten

All in all, every piece of revised literature on the topic of stress in the workplace imply a clear relationship between workplace stress and negative effects. The single counter-argument being that a "decent" amount stress can have positive impacts. So it can be concluded that up to a certain point, stress can be useful, but when it exceeds this point, the consequences can be detrimental.

Concluding, many articles and researches have linked mental health to the workplace and found associations between the two topics. The literature suggests that negative relations were found between work and mental health, as well as positive relationships. Alluding that this influence is binary.

4. Research Plan

4.1 Timeline

To ensure clarity throughout the graduation process, a timeline with phases is made to link time to all upcoming tasks within the research development. The time division in this schedule is in accordance with the official graduation phases provided by the faculty. This timeline comprehensively illustrates the planned execution of the chosen research methods. The primary objective of this timeline is to offer an overview of the upcoming steps, enabling a practical and achievable development of the research. This will serve as an instrument to keep track of tasks and makes sure the project stays on schedule.

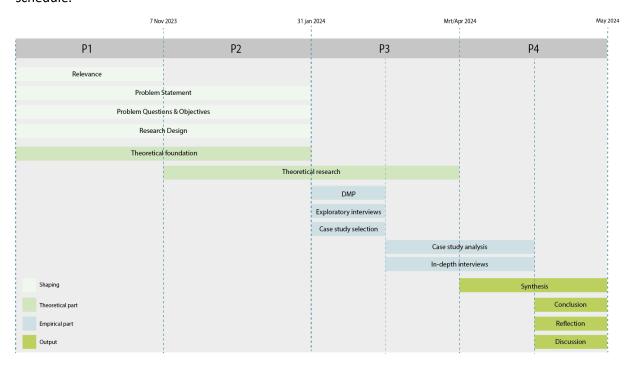


Figure 4.1 Planning graduation process (own figure, 2024)

5. Reflection

The beginning of the graduation process was a tough one, with endless options to choose from. As someone who is interested in many subjects, scoping down was a difficult task. But one thing has always sparked my interest, people, so this is where I chose to begin. Starting from my personal experience at the time, I began wondering why on earth organisations would apply flexible, openplan education and office setups *en masse*, with lots of noise and distractions, in environments where one should be able to concentrate. From there I first began looking into topics such as human functioning within buildings and later came to the conclusion that the focus should not be as much on people as this was too complex to comprehend with my MBE background knowledge, too people oriented. This conclusion came after my P1 consult. So after this, I zoomed out and took a look at the bigger picture. The picture where every organisation claims to want to provide environments that are healthy for users, yet somehow the numbers regarding mental health show rather contrasting results. This led me to believe something could be improved within the gap of "wanting" and "having" of organisations and their workplaces. The journey to this new theme took a while as I find it difficult to scope in a world of endless opportunities and interests.

After this new direction was chosen, the challenge became to define research questions and methods which would aid me to close this gap. Next to this, I struggled, and still struggle, to find the exact literature and frameworks that I need to conduct this research. This is mainly due to the fact that the amount of literature on strategy making is enormous, yet finding suitable frameworks proved to be challenging as the domain of strategy making is very broad in and of itself. Further struggling to find the right literature for my thesis, I decided to put aside my perfectionism and to start either way. While I have found more interesting literature, I still find it difficult to read all the documents and detect whether these could be used as literature or as frameworks for my research. As for the research methods, I tend to want too much. So even though I am content with my approach, I still fear I will not have enough time to conduct every step the way I would like to. So maybe a lesson to myself would be to find ways to simplify and further scope down my research. As I have always developed my thoughts best through conversation, it might be useful to apply this during the meetings with my supervisors and at the company where I will be writing my thesis; Brink. All in all this summarises my process up until now. Even though it was a slow start, I am very happy with the topic and with the choice of my supervisors. I look forward to the following phases.

6. References

- Aarstad, J., & Kvitastein, O. A. (2023). Effect of Long-Term absenteeism on the operating revenues, productivity, and employment of enterprises. *Administrative Sciences*, *13*(6), 156. https://doi.org/10.3390/admsci13060156
- Alagaraja, M., & Shuck, B. (2015). Exploring organizational Alignment-Employee engagement linkages and impact on individual performance. *Human Resource Development Review*, *14*(1), 17–37. https://doi.org/10.1177/1534484314549455
- AlegríA, M., NeMoyer, A., Bagué, I. F., Wang, Y., & Álvarez, K. (2018). Social determinants of mental health: Where we are and where we need to go. *Current Psychiatry Reports*, *20*(11). https://doi.org/10.1007/s11920-018-0969-9
- Allen, J., Balfour, R., Bell, R., & Marmot, M. (2014). Social determinants of mental health. *International Review of Psychiatry*, 26(4), 392–407. https://doi.org/10.3109/09540261.2014.928270
- ArboNed. (2019, November 12). *Wat kost werkstress?* Retrieved January 17, 2024, from https://www.arboned.nl/nieuws/wat-kost-werkstress
- Arkesteijn, M., & Heywood, C. (2021). Alignment theory. In *Routledge eBooks* (pp. 100–116). https://doi.org/10.1201/9781003128786-9
- Arnold, R., & Wade, J. (2015). A definition of systems thinking: a systems approach. *Procedia Computer Science*, 44, 669–678. https://doi.org/10.1016/j.procs.2015.03.050
- Bambra, C., Gibson, M., Sowden, A., Wright, K., Whitehead, M., & Petticrew, M. (2009). Tackling the wider social determinants of health and health inequalities: evidence from systematic reviews. *Journal of Epidemiology and Community Health*, 64(4), 284–291. https://doi.org/10.1136/jech.2008.082743
- Beechler, S., & Woodward, I. C. (2009). The global "war for talent." *Journal of International Management,* 15(3), 273–285. https://doi.org/10.1016/j.intman.2009.01.002
- Bergefurt, L., Weijs-Perrée, M., Appel-Meulenbroek, R., & Arentze, T. (2022). The physical office workplace as a resource for mental health A systematic scoping review. *Building and Environment*, 207, 108505. https://doi.org/10.1016/j.buildenv.2021.108505
- Bouncken, R. B., Qiu, Y., Sinkovics, N., & Kürsten, W. (2021). Qualitative research: extending the range with flexible pattern matching. *Review of Managerial Science*, *15*(2), 251–273. https://doi.org/10.1007/s11846-021-00451-2
- Breslau, N., Schultz, L., & Peterson, E. L. (1995). Sex differences in depression: a role for preexisting anxiety. *Psychiatry Research*, *58*(1), 1–12. https://doi.org/10.1016/0165-1781(95)02765-0
- Burn-out gerelateerde klachten opnieuw gestegen / TNO. (2023, November). tno.nl/nl. https://www.tno.nl/nl/newsroom/2023/11/burn-out-gerelateerde-klachten-gestegen/
- Centraal Bureau voor de Statistiek. (2023, July 17). *Psychosociale arbeidsbelasting (PSA) werknemers; geslacht en leeftijd*. Centraal Bureau Voor De Statistiek. https://www.cbs.nl/nl-nl/cijfers/detail/83049NED
- Chadburn, A., Smith, J., & Milan, J. (2017). Productivity drivers of knowledge workers in the central London office environment. *Journal of Corporate Real Estate*, *19*(2), 66–79. https://doi.org/10.1108/jcre-12-2015-0047
- Clarke, V., & Braun, V. (2016). Thematic analysis. *The Journal of Positive Psychology*, *12*(3), 297–298. https://doi.org/10.1080/17439760.2016.1262613
- Clements-Croome, D. (2018). The role of feedback in building design 1980–2018 and onwards. *Building Services Engineering Research and Technology*, 40(1), 5–12. https://doi.org/10.1177/0143624418812982
- Cooke, H., Appel-Meulenbroek, R., Arentze, T., & De Vries, B. (2018). Surplus leasehold portfolio: a consequence of reshaping the corporate real estate portfolio. *25th Annual European Real Estate Society Conference*. https://doi.org/10.15396/eres2018_69
- Cousins, J. B., & Bourgeois, I. (2014). Cross-Case analysis and implications for research, theory, and practice. New Directions for Evaluation, 2014(141), 101–119. https://doi.org/10.1002/ev.20078

- Danivska, V., & Appel-Meulenbroek, R. (2021). Collecting theories to obtain an interdisciplinary understanding of workplace management. In *Routledge eBooks* (pp. 1–12). https://doi.org/10.1201/9781003128786-1
- Ganster, D. C., & Rosen, C. C. (2013). Work stress and employee health. *Journal of Management*, *39*(5), 1085–1122. https://doi.org/10.1177/0149206313475815
- Hanc, M., McAndrew, C., & Ucci, M. (2019). Conceptual approaches to wellbeing in buildings: a scoping review. Building Research and Information, 47(6), 767–783. https://doi.org/10.1080/09613218.2018.1513695
- Henderson, R. K., Snyder, H. R., Gupta, T., & Banich, M. T. (2012). When does stress help or harm? The effects of stress controllability and subjective stress response on stroop performance. *Frontiers in Psychology*, 3. https://doi.org/10.3389/fpsyg.2012.00179
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. https://doi.org/10.1037/0003-066x.44.3.513
- Hoendervanger, J. G., Van Der Voordt, D., & Wijnja, J. (2017). Organisation and people centred management of smart workplaces. *Smart WorkPlace*, 1(1), 44–49. https://research.tudelft.nl/en/publications/organisation-and-people-centred-management-of-smart-workplaces
- Jean-Louis, C. (2012). Epuisement professionnel des médecins (« Burn-out syndrome »). ResearchGate. https://www.researchgate.net/publication/320273621_Epuisement_professionnel_des_medecins_Burn-out_syndrome
- Jensen, P. A., & Van Der Voordt, T. (2016). *Facilities management and corporate real estate management as value drivers: How to Manage and Measure Adding Value*. Taylor & Francis.
- Joroff, M. L. (1993). Strategic management of the fifth resource: Corporate Real Estate.
- Kämpf-Dern, A., & Pfnür, A. (2014). Best practice, best model, best fit. *Journal of Corporate Real Estate*, 16(2), 97–125. https://doi.org/10.1108/jcre-09-2013-0027
- Kaplan, R. S., & Norton, D. P. (1996). Linking the balanced scorecard to strategy. *California Management Review*, *39*(1), 53–79. https://doi.org/10.2307/41165876
- Kropman, D., Appel-Meulenbroek, R., Bergefurt, L., & Blanc, P. M. L. (2022). The business case for a healthy office; a holistic overview of relations between office workspace design and mental health. *Ergonomics*, 66(5), 658–675. https://doi.org/10.1080/00140139.2022.2108905
- Leesman. (2019). The world's best workplaces 2019. In *Leesman*. Retrieved January 14, 2024, from https://www.leesmanindex.com/publications/the-worlds-best-workplaces-2019/
- Maslach, C. (2017). Finding solutions to the problem of burnout. *Consulting Psychology Journal: Practice and Research*, 69(2), 143–152. https://doi.org/10.1037/cpb0000090
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, *2*(2), 99–113. https://doi.org/10.1002/job.4030020205
- Ministerie van Algemene Zaken. (2022, July 21). *Kabinet start brede beweging voor betere mentale gezondheid*. Nieuwsbericht | Rijksoverheid.nl. https://www.rijksoverheid.nl/actueel/nieuws/2022/06/10/kabinet-start-brede-beweging-voor-betere-mentale-gezondheid
- Ministerie van Algemene Zaken. (2023, November 10). *MHPSS worldwide: facts and figures*. Mental Health and Psychosocial Support in Crisis Situations | Government.nl. https://www.government.nl/topics/mhpss/mhpss-worldwide-facts-and-figures
- Mintzberg, H., Ahlstrand, B., & Lampel, J. B. (1998). Strategy Safari: The complete guide through the wilds of strategic management. Pearson UK.
- Miraglia, M., & Johns, G. (2016). Going to work ill: A meta-analysis of the correlates of presenteeism and a dual-path model. *Journal of Occupational Health Psychology*, *21*(3), 261–283. https://doi.org/10.1037/ocp0000015
- Nientker, J. (2017). Corporate Real Estate Alignment in Practice: A study on how corporate real estate is aligned by multinational corporations in different industries in practice and its relation to theory. http://resolver.tudelft.nl/uuid:8799c992-b1be-4e0f-9a33-a7dfc2bcbe3e

- Oseland, N. (2009). The impact of psychological needs on office design. *Journal of Corporate Real Estate*, 11(4), 244–254. https://doi.org/10.1108/14630010911006738
- Overspannenheid en burn-out | Volksgezondheid en Zorg. (n.d.). https://www.vzinfo.nl/overspannenheid-en-burn-out#node-prevalentie-zelfgerapporteerde-burn-out-bij-werknemers
- Peter, J. M., Dewulf, G. P., & De Jonge, H. (2000). The impact of evolving structures on managing corporate real estate. *Journal of Corporate Real Estate*, *2*(1), 58–67. https://doi.org/10.1108/14630010010811211
- Porter, M. E. (1980). Industry structure and competitive strategy: keys to profitability. *Financial Analysts Journal*, *36*(4), 30–41. https://doi.org/10.2469/faj.v36.n4.30
- Sahadat, I. (2022, December 16). We hebben geen idee wat een burn-out is, zegt psychiater Christiaan Vinkers.

 Wat de zelfverklaarde experts ook zeggen. Volkskrant.

 https://www.volkskrant.nl/editie/20231203/we-hebben-geen-idee-wat-een-burn-out-is-zegt-psychiater-christiaan-vinkers-wat-de-zelfverklaarde-experts-ook-zeggen~b486dd59/
- Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International*, *14*(3), 204–220. https://doi.org/10.1108/13620430910966406
- Schaufeli, W. B., & Taris, T. W. (2014). A Critical Review of the Job Demands-Resources Model: Implications for Improving Work and Health. In *Springer eBooks* (pp. 43–68). https://doi.org/10.1007/978-94-007-5640-3-4
- Schneiderman, N., Ironson, G., & Siegel, S. D. (2005). Stress and health: psychological, behavioral, and biological determinants. *Annual Review of Clinical Psychology*, 1(1), 607–628. https://doi.org/10.1146/annurev.clinpsy.1.102803.144141
- Stemler, S. E. (2015). Content analysis. *Emerging Trends in the Social and Behavioral Sciences*, 1–14. https://doi.org/10.1002/9781118900772.etrds0053
- Tagliaro, C., & Ying, H. (2021). Decision-making theory. In *Routledge eBooks* (pp. 85–99). https://doi.org/10.1201/9781003128786-8
- Teasdale, E. L. (2006). Workplace stress. *Psychiatry*, *5*(7), 251–254. https://doi.org/10.1053/j.mppsy.2006.04.006
- Thakore, R., Kavantera, A., & Whitehall, G. (2021). Systems-thinking theory. In *Routledge eBooks* (pp. 25–35). https://doi.org/10.1201/9781003128786-3
- Vaingankar, J. A., Chong, S. A., Abdin, E., Kumar, F. D. S., Chua, B. Y., Sambasivam, R., Shafie, S., Jeyagurunathan, A., Seow, E., & Subramaniam, M. (2020). Understanding the relationships between mental disorders, self-reported health outcomes and positive mental health: findings from a national survey. *Health and Quality of Life Outcomes*, *18*(1). https://doi.org/10.1186/s12955-020-01308-0
- Van Der Voordt, D., & Jensen, P. A. (2023). The impact of healthy workplaces on employee satisfaction, productivity and costs. *Journal of Corporate Real Estate*, 25(1), 29–49. https://doi.org/10.1108/jcre-03-2021-0012
- Van Lier, H. (2024, January 11). Hoe definieer je een burn-out en hoe voorkom je er zelf een? Volkskrant.

 Retrieved January 16, 2024, from https://www.volkskrant.nl/beter-leven/hoe-definieer-je-een-burn-out-en-hoe-voorkom-je-er-zelf-een~baded928/
- Van Meel, J. (2019). Activity-based working; The Purenet practice guide.
- What is Organizational Maturity | IGI Global. (n.d.). https://www.igi-global.com/dictionary/organizational-maturity/21517#:~:text=The%20extent%20to%20which%20an,measured%20via%20a%20process%20 appraisal.%20%5B
- Wiersema, F., & Treacy, M. E. (1993). Customer intimacy and other value disciplines. *Harvard Business Review*, 71(1), 84–93. https://dialnet.unirioja.es/servlet/articulo?codigo=341198
- workplace Quick search results | Oxford English Dictionary. (n.d.).
 https://www.oed.com/search/dictionary/?scope=Entries&q=workplace
- World Health Organization: WHO. (2022, June 17). *Mental health*. https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response
- Yin, R. K. (2009). Case study research: Design and Methods. SAGE.