Master thesis:

Professional identity and bottom-up change initiatives

By young physicians in Dutch hospitals

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Abstract

This study builds upon existing literature on social activism, bottom-up change, insider activism, and professional identity. By merging these research strands, this study aims to provide insight into the experiences of young physicians who participate in social activism through bottom-up change initiatives and explore the role of professional identity in this process.

An inductive qualitative study that explores the experiences of young physicians involved in bottom-up change initiatives was performed. Through interviews and document analysis, the identity tension within the medical profession which is instigated by two different forces challenging the professional identity was studied. Opposing forces are on one hand to change the professional identity and on the other hand to endorse the current professional identity. These identity challenge together with the thorough socialisation involved in medical training leads to a split in identity of the young physicians. This split identity motivates them to engage in bottom-up change initiatives as a means of repairing this split identity. Successful implementation of these initiatives leads to occupational change and the development of a adapted professional identity. However, failure to enact change or the perception that change is unattainable can contribute to burnout and dropout among young physicians.

1. Introduction

Problem context

Within the literature on social activism, bottom-up change and insider activism are well known concepts. Other well-known concepts within the management literature are those of occupational groups and professional identity. This study seeks to merge these strands of research by examining the experiences of young physicians partaking in social activism through bottom-up change initiatives and what role professional identity plays in this process.

Social activism is defined as "instances in which individuals or groups of individuals who lack full access to institutionalised channels of influence engage in collective action to remedy a perceived social problem or to promote or counter changes to the existing social order" (Briscoe & Gupta, 2016, p 4). Medical students and young physicians who try to initiate change can be seen as social activists. They lack full access to institutionalised channels of influence because of their status within the occupation and they try to engage in or rally collective action to change the existing social problem/order of the current working culture in medicine. Insider activists are full members of organisations that partake in bottom-up change initiatives (Briscoe & Gupta, 2016). Young physicians and medical students are usually not full members of the hospitals they work in or are only temporary members, but they still have a high dependency on the organisations and occupational members for their evaluations (Briscoe & Gupta, 2016). This makes it harder for them to participate in insider activism and makes bottom-up change more difficult because there is not one powerful core or a top management to aim at due to the professional bureaucracy in hospitals (Andreasson et al., 2018; Mintzberg, 1980). Because of this, a broader view on change is needed than organisational change within one organisation.

According to van Maanen & Barley (1984, p 291) an occupation is characterised by "common tasks, work schedules, job training, peer relationships, career patterns, [and] shared symbols". Members form a close-knit community in which they identify themselves through their work and share common values, norms and perspectives that go beyond their job. Occupations are not merely a means of making a living but rather deeply ingrained in organisational and social life, providing members with a significant and lasting sense of identity (Ashcraft, 2012; Bechky, 2011; Goodrick & Reay, 2010; Leavitt et al., 2012). Medical students and young physicians are part of the occupational group of physicians or are going to be a part of this occupational group. The occupation of physicians is heterogeneous, every specialty can be seen as a customised occupational group or community. They may share communalities with other specialties at a

macro level, at a micro level they have their own customs, practices and values (Wright et al., 2017). Due to the fact that the medical students and young physicians are only temporary members of the organisation (sometimes only weeks), but aim to be permanent members of the occupation, the view of change within an occupation is interesting for this research project instead of just looking at change within one organisation.

Professional identity is an important part of being a physician. Medical education uses a lengthy socialization process leading to the formation of a strong professional identity which is used to govern the profession and the professionals within this profession (Cruess et al., 2015). However, the professional identity of physicians is under pressure and the younger generation has different views on what it means to be a physician as is shown for example in this newspaper article (Saris, 2022) leading to tensions between the younger generation and the older generation of physicians. This process of identity formation and the professional identity of physicians and the tension the younger generation feels, may play an important role in the initiation of bottom-up change initiatives. This tension and the feeling whether or not change is possible may contribute to feelings of burnout and eventually dropout. This tension within the professional identity and its relation to bottom-up change initiatives by young physicians will be the focus of this research project.

Burnout in medical students and young physicians is high according to the union for young physicians named De Jonge Specialist (2022). Medisch Contact (2022), a trade journal for Dutch physicians, reports that even though a lot has been written about physician and medical student burnout, the numbers for burnouts in medical students and young physicians are not decreasing. In a questionnaire held among young physicians by De Jonge Specialist (2022), 26% consider quitting and 24% of the young physicians have burnout symptoms. Burnout leads to an increased risk of medical errors, miscommunication and dissatisfaction of patients, but also to decreased job satisfaction, regrets about career choices and lower productivity (Hodkinson et al., 2022; West et al., 2018). Young physicians are leaving the hospital setting leading to shortages in staff and an increased workload for those left behind (Harbers & Sikkel, 2023). Bustraan et al. (2019) created an overview of why young physicians drop out of their training program. Leading factors are work-life balance, job content, workload, and specialty culture. It is essential to optimise working conditions for medical students and young physicians to lessen the amount of burnout and drop out. Attempts to try and change the amount of burnout and dropout are not achieving their goals or supported by the university as can be seen for example in this news article by Van Pelt and Lambeets (2022). Young physicians are trying to

take action, for example through a foundation called *De Jonge Dokter* and the *Zin in Zorg* Movement ('Zeggenschap over de toekomst van het werk', 2021) in which young physicians are trying to change the healthcare system, however little is known about these actors, their motivation and their initiatives for change. Hence, this thesis will focus on these actors and how they experience their change initiatives, contributing to the literature on insider activism within an occupation. Moreover, it focuses on the influence of these change initiatives on their professional identity and how the change in professional identity influences their change initiatives.

Objective and research question

Problems of burnout and young physicians quitting the medical field are pressing. Even though attention has been brought to the issues in the past few years, real change that influences these numbers seems to not take hold or interventions are not working, as indicated by the trade journal Medisch Contact (2022). Notably, professionals and students that have often spent years of their lives working for their place in the field decide to quit or become burned out. There is a lack of outside triggers demanding better working conditions for medical students and young physicians and therefore, the call for change needs to come, at least in part, from within and from the bottom of the occupation, the young physicians themselves.

Based on previous literature, a few gaps can be identified that are related to this research project. First of all, the group of medical students and young physicians are at the cusp of being full members of the organisation or occupation, but they are not full members yet. However, they still have a high dependency on the targeted institution of these change initiatives. Research has been done on either full insiders or intermediate cases (Briscoe & Gupta, 2016; Kellogg, 2012; Lauche & Erez, 2023), but little to no research has focused on actors who are not fully one or the other. As described before, Howard-Grenville et al. (2017) studied occupational change without external triggers. In this research about occupational change, full members of the occupation are studied. This leads to the second gap this research project will focus on; what do occupational change initiatives look like from those at the edge of the occupation and what are the effects of these change initiatives in a different occupational group in a different sector than chemistry (Howard-Grenville et al., 2017). Furthermore, there is lot of literature on bottom-up change, which includes insider activism and issue selling, focus on one organisation with a powerful core to whom the change can be aimed (Briscoe & Gupta, 2016; Gutierrez et al., 2010). In this case there is not one powerful core to sell the changes to and the organisational structure of hospitals (the professional bureaucracy) is a possible barrier to change (Andreasson

et al., 2018; Mintzberg, 1980). This research project will contribute to existing literature about bottom-up change by providing insight into change initiatives led by a particular subset of organisational members, who are not full members, with a high dependency on the institution in an occupation which is defined by a strong professional hierarchy and bureaucracy.

Lastly, the profession of physicians is highly institutionalised, which leads to a strong professional identity and a long process of socialisation is performed during medical training (Cruess et al., 2015; Jarvis-Selinger et al., 2012). However, it seems like the professional identity is becoming less imperative for the younger generation who want to have a life and personality outside of being a doctor and the change initiatives performed by these young physicians clashes with this socialisation process and the professional identity of physicians (Gutierrez et al., 2010; Kellogg, 2012; Pratt et al., 2006). Looking at how these young physicians try to influence the occupation while being at the bottom of the hierarchy could provide new insights on occupational change and professional identity that might impact other occupational groups and possible change initiatives in these groups, for example in occupations such as law or engineering. Furthermore, the majority of the literature on professional identity focuses on influences from outside the profession such as legislation or activistic groups (Adisaputri & Ungar, 2023; Kellogg, 2009, 2012; Wright et al., 2017) but very little to no literature focuses on professional identity challenges from within the profession.

By looking at bottom-up change agents and initiatives within the Dutch healthcare system insights are created into how these young physicians experience these change initiatives and the interaction between change initiatives and professional identity. The guiding research question is: “How do those at the edge of an occupation experience change efforts in their occupational field?”. This research question will be subdivided in the following themes:

a. Professional identity
b. Professional identity challenge
c. Bottom-up change

Outline

Chapter 2 will provide an overview of the theoretical background that underpins this study. The employed methodology for this thesis is elaborated upon in chapter 3. Chapter 4 presents a detailed analysis of the findings and chapter 5 offers a comprehensive discussion and conclusion including the practical implications, reflection, and recommendations for future research.

2. Theoretical background

In this chapter an overview of the literature on professional identity, professional identity change and challenges and the link to bottom-up change is discussed.

Professional identity (formation)

Professional identities play a significant role in medicine. A professional identity refers to the way physicians define themselves within their medical profession, encompassing their values, beliefs, skills and behaviours (Goodrick & Reay, 2010). The professional identity of physicians encompasses the commitment to prioritise patient well-being, autonomy, confidentiality, ethical considerations and promotion of public health (Bernat, 2012; KNMG, 2022). Professional identities of physicians are shaped by external factors such as the organisational context, societal norms, evolving healthcare policies, and public expectations (Bernat, 2012; Cruess & Cruess, 2008; Saks, 2021).

Physicians develop their professional identities through a combination of rigorous education, clinical & non-clinical training, patient interactions, role models, symbols and rituals (Cruess et al., 2015). This process begins with their acceptance into medical school, where aspiring physicians acquire the foundational knowledge and skills necessary to practise medicine. Through socialisation they undergo a transformation in which they go from members of the general public to skilled professionals (Cruess et al., 2015). During medical training there are several stages and steps to identity formation, for example, the identity of a medical student differs from that of a resident and the identity of a resident differs from the identity of a medical specialist (Jarvis-Selinger et al., 2012). This happens through a process called identity development. Part of identity development is the adoption of a new identity when moving on to the new stage and deconstruction of the former identity of the previous stage. Social interaction is fundamental to the process of identity development. An individual can only know themselves in relation to specific social groups and the roles they occupy within this group (Jarvis-Selinger et al., 2012).

Professional identity change

However, professional identities in healthcare and among physicians are not fixed or static. They evolve and adapt over time in response to changes in medical knowledge, advancements in technology, economic pressure and evolving societal norms (Bernat, 2012; Cruess & Cruess, 2008; Saks, 2021). The professional identities of doctors are closely intertwined with their status within society. The status of physicians has historically been held in high regard, and the

medical profession is often associated with prestige, authority, and expertise (Pratt et al., 2006). Changed expectations and societal norms can lead to status based tensions. In the past the profession was dominated by white males and had an exclusionary character (Cruess et al., 2015). A shift has taken place in which a larger part of medical students and thus doctors is no longer male or white (Kellogg, 2012; Van der Velden et al., 2008). This leads to identity challenges within individuals entering the medical profession who do not fit the previous framework of identity of a physician but also creates status tension for current status holders whose identities are being challenged by the new more diverse group entering into medicine (Kellogg, 2012). According to Ashcraft (2012) professional identity is not only derived from the profession and thus influences the individual. It is a reciprocal relationship in which the individuals that are part of the profession also shape the identity of a profession as can be seen in a white male dominated profession such as medicine in which a masculine culture is enforced (Kellogg, 2012).

Professional identity challenge

Split identification is one explanation of how individuals cope when there is a difference between their beliefs and how the beliefs of the institution they are aligned with manifest (Gutierrez et al., 2010). Possible reactions are for example to decrease the level of identification (Fiol, 2002), which can ultimately result in an exit (Pratt, 2000) or in ambivalent identification which can lead to deidentification with part of the institutes' beliefs while still supporting other parts of the same institute (Gutierrez et al., 2010).

Gutierrez et al. (2010), studied split identification in church members after a crisis within the church. By splitting their identity, members maintained identification with valuable aspects of the church's values but disidentified with organisational parts that led to the crisis and needed repair before the split identification could be remedied. They showed three processes involved in splitting identification: crafting a split identification from the institution by stating they still shared the same core values of the church but disagreed with the organisational problems, attempting to repair the split identification and lastly, after failed repairs, sustaining a split identification (Gutierrez et al., 2010). Split identification shows that identity formation and loss are a process (Ashforth et al., 2008) and Gutierrez et al. (2010) shows that split identification can lead to bottom-up change initiation by insiders.

Professional identity and bottom-up change initiatives

The tension within the individuals identity is followed by a split in identity. In an attempt to repair this split, bottom-up change initiatives by the insider activists could be the answer. However, bottom-up change initiatives are more difficult to initiate from the position of the young physicians as described before in the introduction. This paragraph will focus on how the social change movement, bottom-up change initiatives, insider activism and occupational change are related to the professional identity of these young physicians.

Social activism encompasses the collective actions undertaken by individuals or groups who lack complete access to established channels of influence, aiming to address perceived social issues or advocate for changes to the prevailing social structure (Briscoe & Gupta, 2016). Social change movements can be categorised as either inside activists which are full members of the target organisation, intermediate cases which are temporary or partial members of the target organisation, and outside activists which are non-members of the target organisation (Briscoe & Gupta, 2016). When medical students and young physicians endeavour to instigate change, they can be viewed as social activists. Given their occupational status, they lack full access to institutionalised avenues of influence and thus seek to mobilise collective action, striving to transform the existing social problems and cultural norms prevalent in the medical field. Medical students are an intermediate case, while the young physicians working in the organisation are somewhere along the spectrum in between insider activist and intermediate case. Both groups have a high dependency on the organisation because they are reliant on the organisation and its employees for positive reviews and their place to study. This dependency makes it harder to partake and incentivize others to join a movement for change. Compared to outsiders, medical students and young physicians may have more insider knowledge of the organisation and its culture compared to outsiders but they may lack insights into informal social and power structures (Briscoe & Gupta, 2016).

Engagement in insider activism and bottom-up change is made more challenging, due to the organisational characteristics of the hospital environment. A hospital can be categorised as a professional bureaucracy where power is more based on expertise than on top down steering and there is a strong hierarchy based on this expertise (Andreasson et al., 2018; Mintzberg, 1980). The hierarchy further inhabits partaking in insider activism and the effectiveness of bottom-up change initiatives because it can have harmful side effects on interprofessional collaboration, creating a safe learning environment and barriers to report misconduct or abuse (Vanstone & Grierson, 2022). The organisational structure of a professional bureaucracy is

characterised by a decentralised power core which leads to the hospital being a rigid structure that is slow to adapt to changes in the environment. This makes hospitals difficult to introduce new ideas and implement change in (Andreasson et al., 2018). Based on this knowledge, bottom-up change might be more challenging, not only because there is not one organisation that needs to be changed, there is also not one powerful core to aim these initiatives for change at and personal consequences for initiating change can be grave.

Consequently, a broader perspective on change is required, extending beyond organisational transformation within a single institution. Howard-Grenville et al., (2017) researched occupational change without external triggers in the occupation of chemists but focused more on how the change was brought about. Due to the fact that the medical students and young physicians are only temporary members of the organisation (sometimes only weeks), but aim to be permanent members of the occupation, the view of change within an occupation is interesting for this research project instead of just looking at change within one organisation.

Therefore, the aim of this thesis is to research the experiences of the younger generation physicians who partake in bottom-up change initiatives and to see what the role of professional identity is on these change initiatives. An occupational view to insider activism is taken, in which these young physicians are seen as insiders within the occupation.

3. Methodology

The methods employed in this research project are elaborated on in this chapter. This includes a description of the research setting, data analysis, the research perspective and lastly the research ethics will be discussed.

Methods

An inductive approach was adopted due to the gap in the current knowledge regarding change agents at the edge of an occupation with limited power and a high dependency on the occupational community. An inductive approach begins with the data as the starting point, thereby limiting any biases or pre-existing limitations that could influence the analysis of the phenomenon. Inductive approaches are commonly utilised in qualitative research, which aims to develop detailed and comprehensive descriptions of social phenomena. An iterative process ensues (Bleijenbergh, 2016; Myers, 2019), meaning there was a cyclical process of collecting, analysing, and refining data in order to develop a more nuanced understanding of this particular phenomenon. Iteration is particularly useful when studying complex phenomena to get a more in depth understanding (Myers, 2019). By combining the iterative and inductive approach the aim was to explore the experiences of the young physicians who partake in bottom-up change initiatives to get an understanding of the complex phenomenon of professional identity and bottom-up change initiation. Based on the themes and patterns that emerged from the interviews, new insights were developed.

Multiple methods were used but the main focus was the semi-structured interviews. An overview of the interviews that were analysed can be found in Appendix 1. These interviews were performed with the aim to "obtain both retrospective and real-time accounts by those people experiencing the phenomenon of theoretical interest" (Gioia et al., 2013, p 19). These interviews with young physicians taking part in bottom-up change initiatives gave insight into their motivations, demotivators, how they experienced the change initiatives, their view on the medical profession and how these change initiatives affected them. The interview questions were based on sensitising concepts relating to motivation, demotivators, identity, burn-out, working conditions, work culture and change initiatives. Attention was paid when constructing the questions: the focus of the research question(s), are they thorough but broad enough and are they open-ended and not leading the witness (Gioia et al., 2013). The semi-structured interviews gave the interviewer the possibility to ask deeper questions about topics that arose during the interview but also gave some consistency across interviews. During the process of interviews,

the interview questions as well as the research question were subjected to change based on new knowledge and insights gained from the interviews and other data collection methods (Gioia et al., 2013).

For the interviews, non-probability sampling, which entails the non-random picking of a sample, was used due to the qualitative nature of this study and the limited time frame (Saunders et al., 2009). Non-probability sampling can lead to bias but because this research is exploratory in nature and aims to get a feel of the complex phenomena without necessarily the wish to generalise the findings, this bias should not influence the quality. Medical students and young physicians who (tried to) start movements for change independently of these aforementioned organisations are eligible as participants for this research project. Multiple organisations were approached that focus on advocacy and change initiation for/by young doctors. Unfortunately, this yielded little to no participants. My personal network was used by posting a Facebook and LinkedIn message which yielded most of the participants. Two participants were contacted through the newspaper that interviewed them and one person I contacted directly after seeing their participation in a change organisation.

The second methodology employed in this study entails conducting a document analysis of publicly accessible texts including trade journals, newspapers, university and hospital websites, social media platforms, and other similar sources. Documents were assessed for their quality, four criteria were used: authenticity, credibility, representativeness and meaning (Myers, 2019). An overview of the analysed documents can be found in appendix 2. Document analysis can be used to scrutinise and assess both printed and electronic texts (Bowen, 2009). The aim of performing the document analysis was to get a more complete understanding of the context of the phenomena being researched. While performing the document analysis a constructivist approach was applied. Constructivists see reality as socially constructed and sustained through social interaction (Lee, 2012). Lee (2012) further describes that there are multiple levels to conducting a discourse analysis of which one is the context in which the discourse takes place and how interactions give rise to a specific social order or hierarchy. This is very relevant for the phenomena studied because medical students and young physicians are part of a highly hierarchical occupation with a rich history in which the social order plays an important role. Johns (2006) argues in his review about context that it is an important factor in explaining behaviour of individuals and is often an underrecognized influence on research outcomes in management studies.

By using method triangulation, a fuller and more nuanced picture of what is happening was created (Gibson, 2017; Myers, 2019) This increases the trustworthiness and credibility of the results. Triangulation also increased the validity and reliability of the results and helps address possible biases and limitations. Gathered information was in Dutch due to the context of this research project.

Research setting

The research setting is the Dutch healthcare and medical education system. Medical education in the Netherlands takes place at eight faculties of universities distributed across the country (KNMG, 2021). To become a general doctor, students must complete a three-year bachelor's program followed by a three-year master's program which consists largely of internships. In these internships, the students are sent to hospitals all over the country and to different specialties. After these 6 years these students become general doctors but they are not specialised yet. Specialisation is needed but it often takes time to get into specialty training. During this time young doctors work as doctors not in training to be a medical specialist (ANIOS = Arts niet in opleiding tot specialist). The competition for securing a spot in their desired specialty is high. When they secure an education spot for their medical specialisation these doctors are referred to as doctor in training to become a medical specialist (AIOS = Arts in opleiding tot Specialist). These training programs to become a specialised doctor usually take four to six years for hospital specialisations (Ten Cate, 2007).

In this research I will focus on young physicians, both ANIOS, AIOS and interns. As described in the introduction, the hospital can be categorised as a professional bureaucracy (Andreasson et al., 2018; Mintzberg, 1980). A professional bureaucracy is based on the standardisation of skills by extensive training and indoctrination leading to them being seen as professionals (Mintzberg, 1980). Medical specialists can be categorised as professionals because they have had extensive training (10 to 12 years) and have a lot of autonomy and freedom in how they work based on their professional skills and knowledge. The standards and norms they follow originate from outside the organisation's own structure, for example from self-governing (occupational) associations and universities. Within the professional bureaucracy there is a bottom-up decision making structure, in which the physicians have to agree with strategic changes. This causes the professional bureaucracy to have a decentralised power core which leads to it being a rigid structure that is slow to adapt to changes in the environment and where it is difficult to introduce new ideas and to implement change in (Andreasson et al., 2018). Based on this knowledge, bottom-up change might be more challenging, not only because there

is not one organisation that needs to be changed, there is also not one powerful core to aim these initiatives for change at. Because hospitals and the occupation of physicians in hospitals have strong characteristics, focusing on the hospital setting for this study aims to limit the scope of the context and increases the chances of finding significant insights.

Data analysis

Data analysis was performed using the Gioia method (Gioia et al., 2013). The Gioia method aims for rigour in qualitative research without losing the potential of qualitative research to generate new knowledge, concepts and theories. Two essential assumptions in the Gioia method are: 1. The social world of organisations is constructed by people and; 2. Assumed is that these individuals are knowledgeable and possess the ability to comprehend and articulate their thoughts, intentions, actions and putting the individuals experience first and aiming to limit influence of the researchers preconceived notions. The Gioia method also assumes that the researcher is knowledgeable and capable of seeing patterns, making connections that informants cannot make themselves and translating these into theoretical terms.

Analysis consisted of multiple steps. The first step was 1st order coding of the interviews. In this step, informants' wording was used as codes. This leads to an explosion in the amount of codes during this stage of the analysis and can lead to a feeling of getting lost (Gioia et al., 2013). Over the nine interviews, there were more than 950 codes. The second step is 2nd order coding in which similarities and differences between categories were analysed and the number of codes was reduced. Labelling the themes by using wording as close to the informants terms as possible. The remaining themes were further analysed to answer the question of 'what is going on here?'. Further efforts were made to see if these concepts hint at an overlapping theory or construct that could be used to explain the phenomenon. Further analysis was performed to see if the 2nd order themes could be further distilled into aggregate dimensions. These three steps were used to generate a data structure which helped make the process visible from raw data to a structured overview. This data structure that was synthesised can be found in appendix 3. After this step, literature and existing theories were compared to what was found in the data.

Researchers perspective

I myself am a former medical student who quit in my fourth year of medical school. I quit studying medicine partly due to personal reasons but also because of the working conditions in the field. It has been more than two years since I quit and I have never regretted this decision to do so. I personally feel like I have enough distance from the field and my decision to quit,

however during the research process I asked outsiders for feedback on the fairness of my reporting and interpretations. Possible positive influences of being a former member of the occupation are a more in depth understanding of the occupation, context and the ability to relate to the participants of this research project which made "getting in" easier. The APA five principles of research ethics (Smith, 2003) advises to be conscious of multiple roles, two interviewees were old acquaintances of mine whom I had not spoken to since leaving the medical field. I did not feel like this influenced the interviews or the information they shared.

A constructivist view was adopted for this research project. According to Guba & Lincoln (1994), constructivism is focused more on relativism; reality is locally and specifically construed for a specific situation, there is not one reality as reality is manmade. According to this paradigm the researcher is part of the study and influences it and the results. Constructivism is used to research how people make sense of the/their world. This paradigm aligns with the Gioia method in which an embedded assumption is that reality is man-made and constructed by people (Gioia et al., 2013). Furthermore, the Gioia method recognizes the influence of the researcher on what is being studied but tries to limit this influence.

The Gioia method is also referred to as a method to ''get in there and get your hands dirty'' research, by conscientiously trying to stay close to the informant's experience and using their words (Gioia et al., 2013). A risk of this is "going native", getting too close and adopting the informant's view and losing oversight of the bigger picture which is necessary for theorising. Especially during the writing process and trying to interpret the findings I noticed that due to my background in medicine and the extensive socialisation I went through myself, I had a hard time to see which of my findings were surprising or noteworthy because a lot of the information gathered was no surprise to me due to my previous experience with the medical profession. When I noticed this and after talking about it with my supervisor, I asked outsiders to take a look at some of the quotes and this helped me gain insight into what was new and interesting about my data and adopt more of an outsider view.

Research ethics

Participants of this study do so voluntarily and will be asked for their informed consent (Smith, 2003). When reaching out to participants the voluntary and anonymous nature of the interviews will be explained as well as the research objectives. Participants will be made aware that they can withdraw at any time during the research project and will be asked specifically for their consent when recording the interviews. The transcripts will be anonymised and the eventual

research paper will be shared with the interviewees if they wish so. Data will be handled and saved securely and non-anonymised data will be shared only with the approval of participants (Smith, 2003).

Honest reflection of the found data is an important part of research ethics (Myers, 2019). This might lead to no new knowledge or insights or completely different results than foreseen. By staying as close to the data as possible and giving a thorough overview of the data analysis process as well as verbatim transcripts and other collected data, honesty is safeguarded. I have no dependency on the field or my connections within the field since quitting medical school which ensures I can take full responsibility for the research findings without fear of retribution from superiors.

By only using publicly available data asking for permission to publish was not necessary (Myers, 2019). In line with the American Educational Research Association (AERA), public data is data you can access without having to log into a domain to get to the information (Myers, 2019). Ethical guidelines from the Radboud University will be followed as well as Dutch and European law.

4. Findings

The guiding research question that is answered is: *"How do those at the edge of an occupation experience change efforts in their occupational field?"*. This research question is answered by subdividing it in the following themes:

a. Professional identity of physicians
b. Younger generations perspective on professional identity
c. Professional identity challenge
d. Professional identity challenge and bottom-up change initiatives

Professional identity

Professional identity is an important part of being a physician. The views on professional identity were illustrated by multiple interviewees for example in quotes such as: *"It is not just an office job of 32 hours per week [..]. It is a whole lifestyle you get swept into."* Interview 1, *"Yeah, look on one side everyone thinks being a doctor makes you something special"* Interview 6, *"In some way it was created that doctors work very bizarre hours"* Interview 7 and;

> *"But a big part of the hospital are fixers, right? The surgeons, the cardiologist […], that is very concrete. Most doctors want to make someone better and want to do everything to make someone better but the question is, is that what someone wants?" Interview 3.*

Part of the professional identity is the socialisation process. One of the interviewed stated the following: *"Is medicine a cult? Yes, I think so."* interview 1,howcasing the far reaching socialisation and identity forming that goes into becoming a medical specialist. This socialisation process starts at the selection of which of the prospective students is allowed to start studying medicine. Multiple times the selection method for the admission into medical school was mentioned in the interviews. The selection method changed in 2015 from random selection to competence based. Personal traits that were used to select students were contributed to an increase in burnout under medical students by some of the interviewees. *"You are basically creating burnouts by selecting them in that way, we are selecting people who always want to be the best in everything they do and you put them in an environment that has very high demands."* Interview 1. However, there is not only selection based on certain personality traits, the way they are selecting students is also effecting the diversity as can be seen in document 16 (Mulder et al., 2022) and the following quote:

"There is, there are nuances, but as someone with western and highly educated parents especially when they are doctors, you have a lot of advantages as a prospective student in the system when compared to random selection, yeah that leads to a nondiverse student population and you don't want that." Interview 3.

But not only during the initial selection for medical school there are barriers to get in for the non-white prospective student. When they make it to the end of medical school, there is another barrier they face to get into specialty training. When looking at diversity, young physicians with a migration background get lost during the selection procedures as is shown in this quote:

"From the medical students, 20-40% has a migration background and only 2-4% of medical specialists has. So, somewhere along the way we are losing a lot of them, especially the selection procedure for young doctors to get into specialty training is a bottle neck." Interview 4.

Even though more than 50% of medical students have been female in the Netherlands since 1989 as can be seen in document 14 (Van der Velden et al., 2008), the figures are only just starting to show that an increasing part of the young physicians is female (2013 39.5%, 2020 48,8% and in 2022 63%) and their share is expected to keep increasing as shown in document 15 (Capaciteitsorgaan, 2022). However, the number of female medical specialists is lacking behind in certain specialties such as surgery, orthopaedics and cardiology. But female representation is also lagging behind in higher positions within hospitals and in academics, document 14 (Van der Velden et al., 2008) and 15 (Capaciteitsorgaan, 2022). This illustrates the slowness and indirectly the difficulty of the profession change and how ingrained this selection bias is. This point is further exemplified by the ongoing efforts of De Jonge Specialist (document 4: *Onjuiste contracten voor anios (38+10u) aangekaart bij NVZ*, 2020), who have been advocating for over three years to prohibit illegal contracts for young physicians who are not in training. Despite these endeavours, it is disconcerting to note that 25% of them are still bound by unlawful contracts as shown in document 8 (De Jonge Specialist, 2022), mainly due to difficult position within the occupation (document 2: *Verdien ik wel genoeg: Voor jou tien anderen*, 2012)

Younger generations perspective on professional identity

From the analysis of the interviews and documents it is clear that the younger generation has a different perspective on the professional identity than the older generation. Being a physician used to be an important part or most of the identity of the older generation. The younger

generation sees being a physician as part of their identity but not their whole identity as is illustrated in this quote: *"Being a doctor used to be your entire life."* Interview 1.

Differences between the professional identity of the older and the younger physicians leads to tensions within the medical professional identity. Multiple factors influencing the younger generations perspective will be highlighted down below.

First of all, there is tension between the current professional identity and the norms, expectations and priorities of the younger generation. In multiple interviews the different composition of the workforce and changing times regarding men working and women doing the household are underlined. Illustrative quotes can be found in appendix 3. Together with the contrasting working conditions and compensation for physicians outside of the hospital, which matches the younger generations priorities more, leads to young physicians choosing to work outside the hospital leading to shortages of especially young doctors not in training in the hospitals as can be seen in document 1 (Harbers & Sikkel, 2023) and as one of the interviewees stated:

"What I think is a beautiful development, yeah in the hospitals they do not think so, is that a lot of colleagues go looking outside of the hospital and there is a huge shortage of young physicians in the hospital. I think, yeah, you have caused that all by yourself. By making everyone work sickly hard and making them work only shifts and by only looking down on young physicians because if you want to get into specialty training, then you have to do all of this. Yeah, then they are going to look elsewhere, where there is more balance in your life, and I think that is very good." Interview 2.

Next to the changing values and more attractive working conditions outside the hospital, the younger generation seems to prioritize other things in life as can be seen in document 5 (Sikkel, 2023a), 6 (Sikkel, 2023b) and 7 (Groen, 2023) but also in the following quote:

"But I have the idea that people attach more value to family life and not necessarily family life, but their private life. The fact that traveling is a thing now, just wanting to do a lot of other things next to it [working]. Parties, festivals, just getting the best out of yourself and not just focus on work." Interview 5.

These factors lead to a challenge of the professional identity of physicians in which working hard and dedicating your life are seen as core values in the current professional identity. Not only have the norms, values and priorities of the younger generation changed, the work of a

physician has also changed. Multiple interviews and documents show that a higher patient turnover and increased administrative burden are factors making the work of a physician more stressful and less rewarding.

Lastly, the uncertainty of the future and the expectations laid upon the young physicians are taking their toll. As mentioned in document 1 (Harbers & Sikkel, 2023), 6 (Sikkel, 2023b) and 12 (Saris, 2022) and as illustrated by interviews 1, 2, 3, 5 and 8. An important factor for young physicians to doubt their future in the hospital are the long time uncertainty of the path to become a medical specialist and afterwards the job insecurity once they made it to medical specialist.

Professional identity challenge

As can be seen in figure 1, the tension between forces wanting to change the professional identity and the opposite forces that endorse the current professional identity leads to a professional identity challenge. These factors are displayed in figure 1.

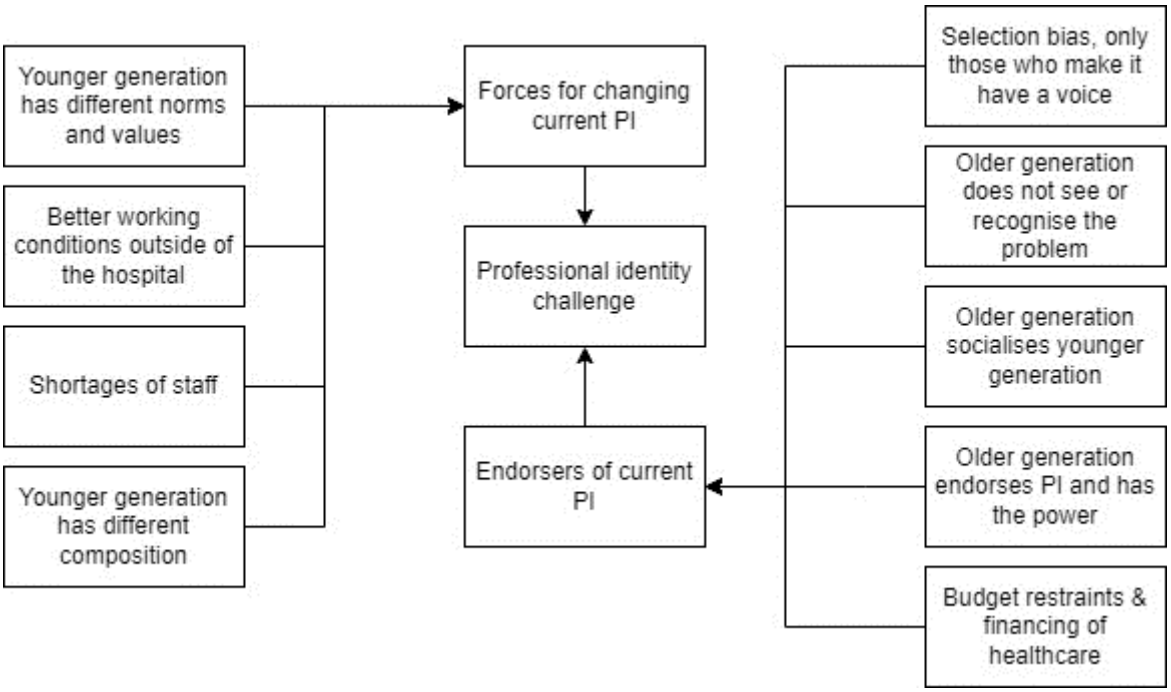

Figure 1 Professional Identity (PI) Challenge

The main focus of this research project is the perspectives of the young physicians, the endorsing factors are therefore from the perspective of these young physicians. Because of this and the focus of the experiences of these young physicians, exemplary quotes and documents can be found in appendix 3.

An important notion under the interviewed is that those who make it in the system, are conditioned by the system and therefore are more likely to endorse the current system and professional identity as can be seen in the following quotes: *"It is also a survival bias, right? Because we only speak to the people who have been in the occupation for 40 years, so those are the people who survived being in the occupation for 40 years."* Interview 1.

Multiple respondents mention the blind spot of those in power/higher positions in the hierarchy to the problems young doctors face. This is partially because they have a hard time identifying with the problems being faced by the younger generation and partly due to the organisational structure and information flows within the hospital system. These aforementioned factors contribute to the endorsement of the professional identity by the generation that has the power.

Socialisation is an important process in the professional identity development and the older generation socialises the younger generation to think, act and work in a certain kind of way. This is a way of passing the professional identity of physicians from generation to generation. This makes it hard to stand up to the people who are your teacher as for example can be seen in the following quote:

> *"As a young physician it is almost always the dependency position, as an intern. You are dependent on your supervisor, not only for supervision but you also want the atmosphere to be nice, but they are not only the ones who assess you, they are also the people who need to have an opinion on whether or not you will be accepted into specialty training."* Interview 2.

Lastly, the way healthcare is financed and budget restraints add to the endorsing of the current professional identity in which physicians are seen as hard workers and fair compensation for those lower in the hierarchy is limited. Part of the way healthcare is financed contributes to the hierarchy and bureaucracy within the system which in itself can be seen as factors limiting the adaptability of the system as is illustrated in appendix 4.

Professional identity challenge and bottom-up change initiatives

Social activism and bottom-up change initiatives in young doctors displayed itself through multiple ways in the individuals that I interviewed. Two of the interviewed tried to start a case against a faculty of medicine because of working hour violations during their internships. Seven of the interviewed were part of different non-profit organisations that focused on change within healthcare with a focus on different parts of the healthcare system such as diversity, working conditions and LGHTBI rights. One of the interviewed was an intern, six were young doctors

working in the hospital and two are currently working outside of the hospital or in a different field.

Most of the change initiatives are more non-confrontational in nature. For example, participating in social media campaigns (Interview 3 and 4), teaching about a certain subject to the younger generation (interview 1 and 2) or awareness actions such as the 9 meter purple crocodile that travels around hospitals that represents the bureaucracy within the hospitals (interview 9). The two young doctors who decided to work outside were also the ones who had the most confrontational initiative of confronting their faculty about work time violations, followed by an official complaint and later publishing their case in the media (interview 6 and 7).

From the interviews and documents the difficult position young physicians and interns are in becomes apparent. Because of a high dependency on the organisation and occupation taking part in change initiatives that can threaten your career, as can be seen in the following quote: *"I think because the change is coming from a new generation and this generation is under supervision of the older generation, if you are in training you have a vulnerable position to speak up to your teacher."* Interview 5.

Most of the interviewees experienced the hierarchy of the hospital. The hierarchy was described as a barrier to change and an inhibitor of the free flow of information between the different layers. Due to the distance in the hierarchy and the social power this pertains, bottom-up change is hindered. During multiple interviews the gap in the top who makes the decision and the younger generations is made, for example in the following quotes:

"In every hospital and what I have noticed myself is that a big part of the people who have the power, don't see the problems or are not currently facing or have ever faced these problems for whatever reason, For example, they are males whose wives took care of homelife as long as they took home the money." Interview 3.

Despite the dependency and hierarchy, bottum-up change initiatives are still undertaken. Reasons for these young physicians to start change initiatives are feelings of something not being right, not feeling appreciated or compensated fairly and an upbringing in which doing something/speaking up when something is unjust as illustrated by: *"So I was thinking, maybe if I have an opinion about that things need to be different, I should do something with it."* Interview 3 and

"First of all, I sort of just got it from my upbringing that you have to try to make things better even when it is something really big or you are thinking, there is no way to change this, you still have to try." Interview 9.

The feeling of momentum and attention to the problem are also important as can be seen for example in this quote *"And so, there already needs to be momentum. I see the momentum there is now, even in a rigid healthcare system, I see it."* Interview 1. But also the feeling of not being able to change the system leads to a feeling of discontent and could eventually lead to leaving the hospital as was the case for this individual whose change initiative did not lead to any change:

"I did not have a burnout but knowing the hours were not right did not sit right with me. […] I had some depressive feelings but I was not depressed because these depressed feelings were clearly related to my internships. Sometimes I wondered if I had not started this battle, if I would have experienced [my internships] differently." Interview 6.

Based on these findings from the interviews and documents, figure 2 was made in an attempt to create insight into the processes at play and how this affects the experiences of the young physicians.

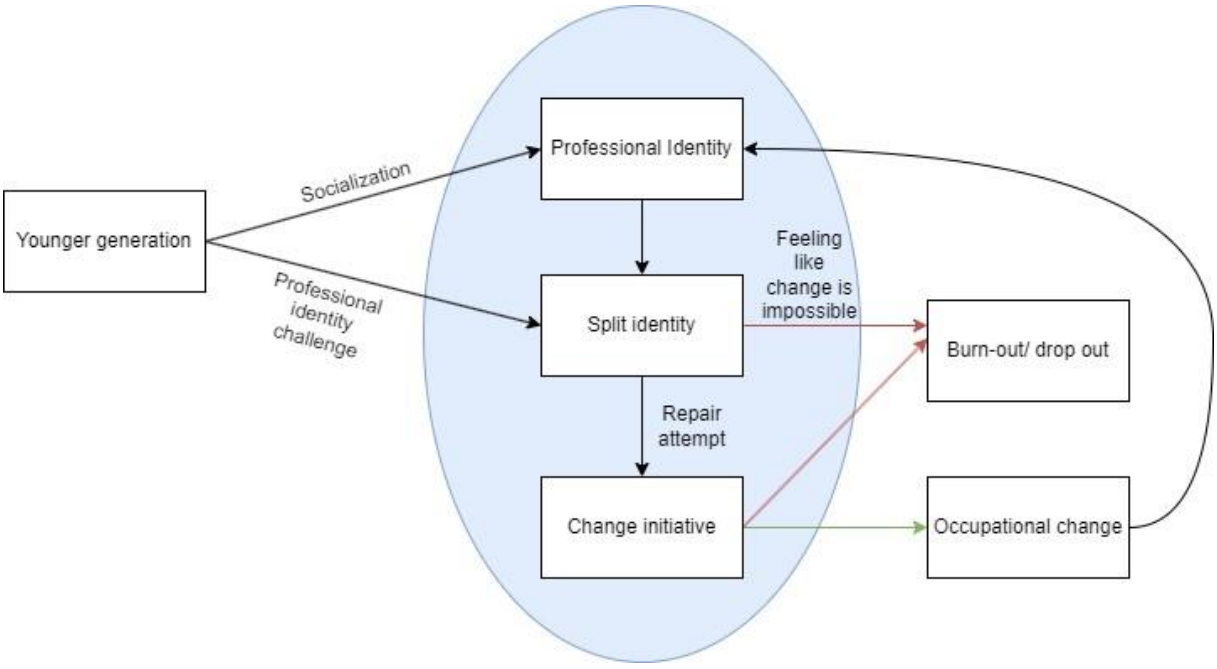

Figure 2 Identity process of young physicians

The younger generation is faced with the socialisation that comes into play with physician training. While they are in this training they are confronted with the professional identity challenge due to their different views on the professional identity of physicians. This in turns lead to a split in their identity. When there is the feeling that change is impossible, the demands of being a physician might take their toll and this leads to burnout and dropout. When there is hope for change, repair attempts are made through change initiatives. If the change initiative it successful, occupational change is possible and the professional identity challenge decreases. However, when an attempt at change fails, it can lead to discontent followed by burnout or dropout.

5. Discussion and conclusion

This chapter first discusses the findings in relation to existing literature. Contributions to what we know will be stated, after which practical implications are discussed followed by opportunities for future research. The chapter will be wrapped up by presenting the conclusions.

Results in relation to existing literature

Professional identity

Professional identity and socialisation play an important role in the medical profession, this is both seen in the literature (Cruess et al., 2015; Jarvis-Selinger et al., 2012) as in this study. The professional identity of physicians is under pressure from outside forces (Bernat, 2012; Cruess & Cruess, 2008; Saks, 2021) as well as forces from inside of the profession as can be seen from the findings. These inside forces lead to a tension between the socialisation process and the formation of the professional identity of the younger generation of physicians. This tension can lead to ambivalent identification which in a certain way needs to be repaired or can lead to an exit of the profession (Fiol, 2002; Gutierrez et al., 2010; Pratt, 2000). This study shows that split identification appears to be present in young physicians and is the result of different parts of the phycisian identity to which they no longer identify being a physician with. They still value the professional values of commitment to uphold ethical standards, prioritise patient well-being, and adhere to evidence-based practices, but no longer agree to the organisational nature of the identity which still encompasses bad working conditions, pressure to perform, a persisting insecure future and the current work culture.

Professional identity challenge and bottom-up change initiatives

The changing social norms and different composition lead to the challenge of the professional identity as also for example can be seen in Kellogs work (2009; 2012). In her work she shows that changes that challenge the status or autonomy of a profession leads to stronger defensive tactics being mobilized to neutralize the perceived threat, but these forces for change were externally based and lead to tension within the profession. Within this research project the tension between the forces who want to change the professional identity and the forces who endorse the current professional identity are shown, but this tension arises not only from external triggers but mostly from within the profession by the young physicians themselves which deviates from existing theory.

The splitting of the identity within young physicians either leads to repair attempts in the form of change initiatives or leads to them leaving the hospital, or being a physician all together,

when these repairs fail and their split identity and values are not reconcilable with the current professional identity of a physician. Gutierrez et al. (2010) wrote about split identification in church members after crises within the church. Similarities can be seen between the reformers who are church members who try to initiate change from the shared values and love they have for the church but who no longer support the organizational structure that made the crisis possible. In their attempts to repair this split in their identification with the institution they started attempts at changing the parts that caused this split in the identification. A lot of similarities can be seen between these church reformers and young physicians, especially in the way they try to repair the split identification by for example underlining their commitment to the core values of the institution. However, an important distinction between the group of reformers described is that these young physicians are part of de medical profession and form a professional identity based on this profession. They are highly dependent on the institution they are trying to reform for their future and have invested many years and a lot of money to become part of the institution. This potentially influences the way these young physicians handle the splitting of identification and the ways in which they try to repair their split identification.

This research deviates from the existing theory because of its focus on professional identity change from within the profession itself which is led by those who are at the edge of the occupation. The theory on split identification is used to create a framework through which bottom-up change initiatives are proposed as a repair mechanism for the split in identity the young physicians feel. An alternate explanation for why initiatives to lessen the amount of burnout and dropout in physicians are failing because they fall short in addressing the underlying mechanism of identity challenges and split identification.

Contributions to knowledge

This study contributes to knowledge by looking into the potential mechanisms that drive change initiation by young physicians, with a specific focus on professional identity challenges from within the profession/occupation. While external factors have traditionally been regarded as the primary sources of professional identity challenges (Kellogg, 2012; Pratt, 2000), this study highlights the significant influence of internal factors within the profession itself. Notably, the changing composition of the workforce and the distinct values of the younger generation within the profession contribute to the complexity of professional identity transformation.

Through an analysis of the experiences of young physicians situated at the edge of the occupation and positioned at the lower end of the professional hierarchy, this study gives insight into their perspectives. By considering the viewpoints of these individuals, a comprehensive understanding of the challenges faced by these young physicians within the medical profession emerges. By exploring the relationship between professional identity, change initiatives and the experiences of young physicians, this study uncovers the underlying mechanisms that drive change initiation by young physicians. These findings provide valuable insights into the process of professional identity challenges within the medical profession and opens opportunities for future research and interventions aimed at promoting a more sustainable and safer professional environment for young physicians.

This research contributes to social activism, insider activism, and bottom-up change literature (Briscoe & Gupta, 2016; Howard-Grenville et al., 2017) by showing the experiences from insiders that are at the edge of the institute they are trying to change. Furthermore, this research connects how tensions within a professional identity give rise to bottom-up change initiatives contributing to literature on professional identity (Cruess et al., 2015; Gutierrez et al., 2010; Kellogg, 2009, 2012; Pratt, 2000). A bridge therefore is formed by this study between the literature on social activism, insider activism, bottom-up change and professional identity.

Practical implications

As described previously in the introduction, the issue of burnout and dropout among young physicians is a significant problem. This research reveals that there are underlying factors beyond just working conditions and culture that contribute to these statistics. This study gives insight into the process of professional identity that these young physicians experience which can lead to burnout or them choosing to leave the hospital or their professions. It also demonstrates how the younger generation perceives the endorsement of the existing professional identity.

The initiatives for change undertaken by young physicians should be embraced as a positive indication of the younger generation's willingness to address the disparities between the medical profession and modern society. The identity challenge faced by this younger generation does not stem from a conflict with the fundamental values of the professional identity but rather with organisational practices that may be outdated and unsustainable. By shifting the perspective on professional identity challenges and change initiatives, a bridge can be built between the current

professional identity and the younger generation, potentially reducing the occurrence of burnout, dropout rates, and the departure of young physicians from the hospital setting.

Limitations

Limitations of this research and the methodology adopted were: the scope, iteration limitations due to time and difficulty finding participants for the interview. These will be elaborated on below.

a limited scope was decided upon before starting the research project, the aim was to research at least a part of the complex phenomena without losing sight of the research question and objective to make it manageable within the set time frame. This leads to the limitation that only the perspective of the younger generation was taken into account for this research project and only the perspective of the Dutch physicians has been taken into account.

Due to the time constraints there was very limited time for iteration and redirecting the focus. During the interviews a broad set of questions was asked due to inductive method but because the interviews were close together, there was limited time to change the interview questions and redirect the focus. Therefore, the collection of information was more broad than necessary, which led to an explosion of information and not always the most in depth questions about the eventual turn the research project took.

Lastly, a difficulty was finding participants for the interviews, this led to a later start of the interviews but also took more time than initially set aside. This could partly be because of the sensitivity of the subject but more likely it was due to the busy schedules of the young physicians. Most young physicians who were interviewed were working part time or in a part of their education in which there was more room to fill in their own time or were in between jobs.

Possible future research

Future research could focus on a broader scope adding young physicians who leave the field all together but also different generations of physicians to get a more rounded view of the professional identity challenges and perspectives on the problem. It would be an interesting addition to get the perspective of the older generation that enforces the current professional identity on the professional identity challenge to contribute to a fuller picture of how this affects the professional identity as a whole. Furthermore, this research only focused on young physicians who work in the medical field but it would also be interesting to increase the scope to young physicians who left field as it was mentioned multiple times that there is a bias in the

system and the voices of those who do not make it in the field are not heard. It would be a contribution to literature on professional identity (formation) and showcase the experiences that led to them leaving the field which could contribute to knowledge about workforce retention.

Other possible future research would be to conduct a similar study in other highly institutionalised professions such as for example law to see if the phenomenon is also occurring in other professions or is only limited to physicians which could contribute to the literature on professional identity and the discussion on the future of professions.

Conclusions

Part of the reason interventions to lessen the amount of burnout and dropout in young physicians seem to fail is their inability to address the deeper rooted tension within the professional identity of physicians that is at play. These professional identity challenges lead to a split in identity of the young physicians in which they support the core values of the medical profession but disagree with the organisational aspects that are ingrained in the professional identity of physicians such as working more hours than is deemed standard in society without proper compensation for overtime and the hierarchy & working culture within the hospitals that contributes to an unsafe environment. This split in identity either leads to repair attempts or burnout/dropout when the young physician feels like the system is unchangeable or change is going to slow. The repair attempts of the young physician can take on the form of insider activism through bottom-up change initiatives aimed at the occupational group of physicians. If successful these bottom-up change initiatives lead to a change in occupational change and a change in the professional identity of physicians. If these changes are thorough enough, the split in identification can be repaired and the identity challenge will cease to exist. If the attempts at repairing the split identification through bottom-up change initiatives fail, this can lead to burnout or dropout of the young physicians.

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7. Appendix

7.1 Interview overview table

Interview number	**Function**	**Date and time**	**Interview duration**	**Online or physically**
1	PhD, ANIOS	24-04-2023 13:00	01:19:30	Physically
2	AIOS	26-04-2023 10:00	00:44:58	Online
3	AIOS	26-04-2023 14:00	01:35:19	Online
4	Intern	28-04-2023 10:00	00:48:00	Online
5	ANIOS	05-05-2023 11:00	00:44:47	Online
6	PhD	09-05-2023 15:30	00:36:27	Physically
7	ANIOS outside of the hospital	12-05-2023	01:29:15	Online
8	ANIOS	16-05-2023 18:00	01:30:12	Online
9	ANIOS	16-06-2023 13:00	01:41:58	Physically

7.2 Document overview table

Document number	Document information	Description of document and where it was used
1	NTVG, Trade journal. (Harbers & Sikkel, 2023)	Article based on research about the shortage of ANIOS and what are the causes for which they performed interviews with ANIOS and specialties in which there is a large shortage. This article was used in the introduction and findings section. This was used in the introduction and findings.
2	Volkskrant, Newspaper. (*Verdien ik wel genoeg: Voor jou tien anderen*, 2012)	A rubric in a newspaper in which readers can sent in questions and get answered by experts. In this rubric, an ANIOS sends in questions about his contract which is unlawful but the advice is to not necessarily pursue action due to his dependency and relationship with his superiors and his chances of getting into specialty training.
3	Medisch contact, Trade journal. (De Geneeskundestudent, 2022)	An article about how working overtime is being taught in medical school and that to tackle the over hours higher on the hierarchical chain, the change needs to start with what medical students are being taught.
4	De Jonge specialist, Union. (*Onjuiste contracten voor anios (38+10u) aangekaart bij NVZ*, 2020)	An article that focuses on the unlawful contracts of the ANIOS and their actions to get this on the agenda of the Dutch Association of hospitals (NZV) and the position of the ANIOS in which it is hard to refuse such contracts.
5	NTVG, Trade journal. (Sikkel, 2023a)	An interview with someone who left the medical profession to work in a different related field. Part of the reason she left is the mentality in the hospital and the

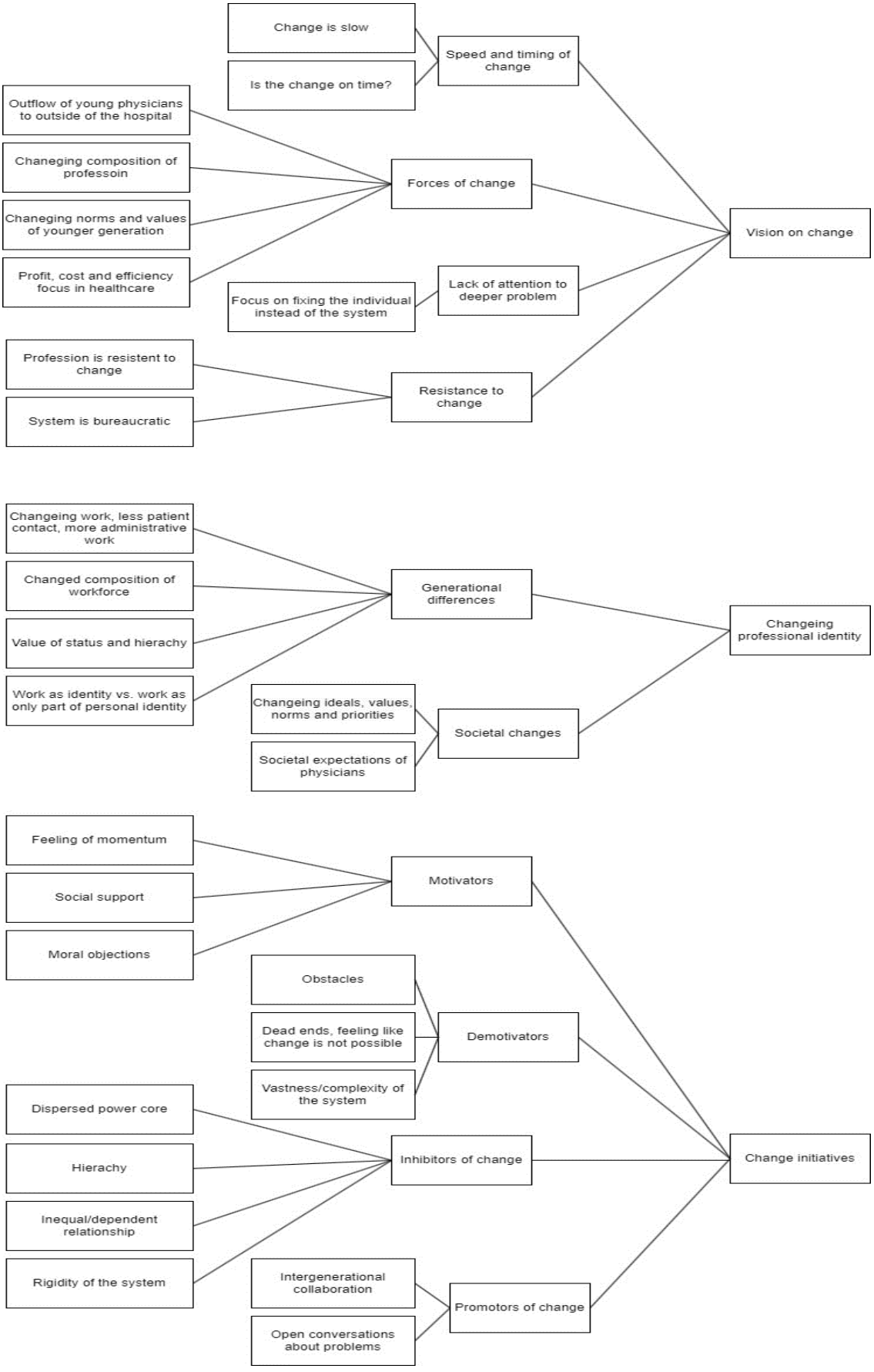
		position of the young physicians and the effect it has on the personal lives of the young professionals. You have to be like the status quo and there is little room for creative ideas, especially when you are the youngest in the hierarchy. She describes the hospital as hierarchical, conservative and everything that comes from the bottom gets stomped down. You are not allowed to disagree because if you stick out your neck you are jeopardizing your career. Because sometimes being a doctors it their entire identity, the toxic culture keeps on existing. This document was used in the findings.
6	NTVG, Trade journal. (Sikkel, 2023b)	An interview with a young physician who decided to leave the medical field. She tells about why she stopped and how people around her reacted when she quit. Part of the reason to quit was a broader interest that just clinical and not wanting to move to the other side of the country. She highlights that the long term insecure future is harder for woman than for men. To maintain young physicians there needs to be more attention to personal development of ANIOS. This document was used in the findings.
7	De Jonge Dokter, Advocacy group. (Groen, 2023)	This is an interview with someone who left the hospital to work in a different field. She describes the feeling before quitting as: “It felt a bit like the previously almost indestructible plant whose roots have been slowly lost and because of that it stopped growing”. Quitting working in the hospital is described as getting of a moving train. She discovered that autonomy, regularity with sometimes irregularities, fun colleagues, connection and appreciation are important to her in her work. Her advice is to show vulnerability and talk about doubts and to ask advise. Dare to choose something

		different. This document was used in the findings section.
8	De Jonge Specialist, Union. (De Jonge Specialist, 2022)	A rapport of De Jonge Specialist about healthy and safe working questionnaire 2022. It shows that young physicians make 7.7 over hours per week and 67% of them do not get compensated for this. 64% of the young physicians would prefer to have a contract for 10 hours less than they are currently working. 25% of aniossen still have unlawful contracts. Almost all (97%) of the young physicians are proud of the work they do but they are unhappy with their working circumstances. 55% of young physician experienced inappropriate behaviour in their current function. 28% of these instances were intimidation from colleagues or their seniors. Inappropriate treatment was experienced by 38% of the young physicians. 46% of young physicians experienced inappropriate sexual comments in their work environment. 26% of young physicians in training to become medical specialists has considered quitting. Reasons to consider quitting are work-life balance (46%) but also the bad job perspective and the culture within the profession. 24% of the young physicians have symptoms of a burnout. These numbers were used in the introduction and findings section.
9	MedNed, trade website, (‘Zeggenschap over de toekomst van het werk’, 2021)	Article about De Jong Dokters and Zin in Zorg beweging. They underline that the change initiation should come from the young generation of physicians. It describes that the older generation does recognize the problems but does not see the urgency for change due to the privileges they have from further in their career. They describe some of the initiatives they have to initiate change. Used in attachment 4.

10	Was removed due to it not being a contribution the the research project.	
11	Dokters op hakken, blog (Fedorushkova & De Vringer, 2019)	This is an interview with Mia Wessels, founder of De Jonge Dokter. She describes her experiences with medical education and why she founded De Jonge Dokter.
12	De Groene Amsterdammer, Magazine. (Saris, 2022)	Article about young physicians quitting their specialty training and describes factors why they are quitting. They describe a complex mix of high administrative burden, work pressure and job insecurity as reasons for this. Furthermore, it is described that the old fashioned ways of the hospital do not align with the new generation of physicians and calls out the hierarchy and litte feministic social codes as some of the causes. This document was used for the introduction, findings section and appendix 4.
13	NRC, Newpaper, opinion piece. (Jensma, 2022)	This opinion piece talks about the parallels of the scandal that was unveiled about the television program The Voice and working conditions for young doctors in specialty training. The parallels are an unsafe work environment, unequal power relations, insufficient oversight and a dominant masculine working climate. It further also describes the status of doctors in society, the financial interest in healthcare and lack of support from the employer for these young doctors. This document was used in the findings section and appendix 4.

14	NTVG, Trade journal. (Van der Velden et al., 2008)	Talks about the increase of female doctors in the Netherlands and about how long it takes/took for woman to have an equal representation within the hospitals. This article was used in the theoretical background and findings section.
15	Capaciteitsorgaan, independent advisor for the government. Report. (Capaciteitsorgaan, 2022)	A report that talks about the current and future medical specialists and developments in the work field. Also describes the percentage of female specialists. Used in the findings and appendix 4.
16	Scientific publication in Medical teacher. (Mulder et al., 2022)	A retrospective cohort study into the consequences of the selection method that has been active since 2015 in the Netherlands. The study shows that the selection method increased inequality of opportunity and decreased student diversity. This document was used in the findings section and appendix 4.

7.3 Tree structure based on data analysis



7.4 Illustrative quotes for figure 1

Forces for professional identity challenge	**Illustrative quotes**
Younger generation has different norms and values	*"And, that is what noticed in my life. I do not want my life as medicine. There is more than medicine and being a physician"* Interview 6 *"Our generation is a lot more conscious and says do not look at me (Ammehoela, mij niet gezien). The older generation finds that harder I think, they also come from a time where you could live on one salary, where there is someone at home who manages homelife. But also what makes healthcare really different is that the productivity and the amount of patients used to be way less, there are just a lot more expectations on young doctors. "* Interview 2 *"People working in hospitals, [the expectation] is that you put a lot of time in it, that is sort of your life. You know, and that is starting to shake because there is a new generation physicians that says, hè, I do not have to be like that in the hospital, I have kids, I would like to see them a few times before they are grown up. If it is up to me, it should be less."* interview 7
Better working conditions outside of the hospital	"*I get it, if I hear from people from my cohort who for example work in occupational medicine, yeah, they earn a gigantic amount of money and they have working hours where they leave by four o'clock, while I start at seven thirty and leave the hospital at seven thirty, and that sometimes is a bit, not necessarily frustrating but it makes me think, that is annoying. But I do not think they should earn less, but it makes me think, why is that so?"* Interview 5 *I hear around me a lot of people saying yeah I do not want to work in the hospital because I want to work parttime later and be able to do things next to it and have a family and have hobby's. And you will not be able to do that if you work in the hospital."* Interview 4

	What do I find a nice way to work? And I noticed during my internships that that is not necessarily in the hospital. It is mostly also because I thought what is asked of you is not in balance with what I wanted to do outside of it." Interview 7 *"Because in all honesty, I have a lot of friends in geriatrics who for example work from 9 to 5 with sometimes being on-call and also have a nice afternoon free who earn almost twice as much as me. So I think there is a discrepancy which makes it enticing to work outside of the hospital."* Interview 8
Shortages of staff	Document 1 (Harbers & Sikkel, 2023) *"What I think is a beautiful development, yeah in the hospitals they do not think so, is that a lot of colleagues go looking outside of the hospital and there is a huge shortage of young physicians in the hospital. I think, yeah, you have caused that all by yourself. By making everyone work sickly hard (ziek hard) and making them work only shifts and by only looking down on young physicians because if you want to get into specialty training, than you have to do all of this. Yeah, then they are going to look elsewhere, where there is more balance in your life, and I think that is very good."* Interview 2
Younger generation has a different composition	Document 12 (Saris, 2022), 14 (Van der Velden et al., 2008), 15 (Capaciteitsorgaan, 2022) and 16 (Mulder et al., 2022)
Endorsers of current Professional Identity	**Illustrative quotes**
Older generation does not see or	*"I think honestly that they do not see how long were are sitting there in the young physician room or were working on the floor. Because the*

recognise the problem	*paediatricians of course are in their own office two or three hallways down and do not necessarily see what we do.“* Interview 8 *Well, actually with a bit of surprise, because they on paper, on paper it was taken care of but in practice it was not, but that is a lot of times the way it is.* Interview 3 Document 9 (‘Zeggenschap over de toekomst van het werk’, 2021)
Older generation socializes the younger generation	*“Is medicine a cult? Yes, I think so.”* Interview 1 **“**B*ecause we as doctors are just obedient people, because you are.. you learned to be in the hierarchy. That is something that fits with your socio-type because otherwise people drop out along the way thinking “Sorry but this is not why I started doing this” and rightfully so. And thereafter during your internships you constantly have your assessment book or portfolio in which you are constantly dependent on people that you have to ask for assessments. What makes that during the day you are thinking: “Yeah, I disagree with this but I am going to smile sweetly because I still have to get an assessment”. So even if you did not start out as obedient, you will be through this process because it is very hard to hold on to who you are if you do it a certain way a 100 times. How in gods name would you still remember how you wanted to be as a doctor without the whole process around it?”* Interview 9
Older generation supports old professional identity and has more power	*“Yeah, the hospital is such a weird system when it comes to power, they are sort of an island on which they can determine everything by themselves.”* Interview 6 Document 12 (Saris, 2022) and 13 (Jensma, 2022)
Budget restraints and financing of healthcare	*“You work with a lot of people and a lot of interests. So, someone once told me: “If you do not get why something goes the way it goes, it is always about money”. And that is just it.. There are gigantic interests, everyone is afraid to lose their incomes and that is because of the system.”* Interview 9

	"But it costs time [to talk to patients] and for talking you can not really open a DBC so you do not get money for it." Interview 3 *"And it also is just because financially they cannot pay it for a group. Yeah, that would be very difficult because if you have 4-5 young physicians working during the they and it is easy to stay longer, than the expense will be enormous."* Interview 8 Document 13 (Jensma, 2022) and 15 (Capaciteitsorgaan, 2022)
Selection bias, only those who make it have a voice	*"It is also a survival bias, right? Because we only speak to the people who have been in the occupation for 40 years, so those are the people who survived being in the occupation for 40 years."* Interview 1 *"All the people who go dropped out or left to different fields, you do not speak to them so it is the old generation, that is per definition the survivals of the entire cohort that started once upon a time. Yeah, and because of that it is not the full picture."* Interview 1