MASTER THESIS

‘Who Am I With AI?’:

Exploring the Impact of AI on Professional Identity

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Abstract

This thesis examines the impact of artificial intelligence (AI) on professional identity, comparing South Korea and the Netherlands through a cross-cultural lens, with a focus on the medical sector. By employing an inductive, qualitative comparative case study approach that incorporates semi-structured interviews and open-ended responses, this study examines the perceived positive and negative implications of AI integration on the self-concept, roles, and values of medical professionals. Guided by the Gioia methodology and thematic analysis, the results show that although AI may disrupt traditional task responsibilities, core professional values such as autonomy, ethics, and patient-centred care still remain substantially resilient. This study highlights how professionals engage in identity work to adapt, resist, or redefine their roles by identifying two main dimensions of experience: “mistrust in AI” and “AI-identity work”. Although AI is often viewed as a supportive tool rather than a threat, the emotional and cultural framing of AI’s influence varies across different contexts. While the South Korean participant frames AI as a collaborative asset, Dutch professionals often place more emphasis on scepticism regarding autonomy. By revealing how internal, organisational, and cultural factors influence identity responses, the study theoretically adds to the body of literature on identity work. Practically, it highlights the need for identity-sensitive implementation strategies in the adoption of AI. In conclusion, AI does not replace the professional, it redefines them.

Keywords: Artificial Intelligence; Professional Identity; Identity Work; Medical Professionals

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1. Introduction

Over the past few years, Artificial Intelligence (AI) has emerged as a disruptive technology with the potential to significantly impact, both positively and negatively, various aspects of today's workplaces and societies (Jarrahi, 2018). AI is defined as a collection of interrelated technological innovations aimed at solving problems that would typically need human cognitive abilities (Selenko et al., 2022). AI also has the potential to replace core activities and alter traditional work dynamics, so that its introduction into the workplace presents difficulties to individuals' professional role identities (Strich et al., 2021; Jussupow et al., 2022). Additionally, it can also question and affect professional roles, such as those of doctors or lawyers, and how such professions are defined (Tursunbayeva & Renkema, 2022). Indeed, the emergence of AI brings with it a disruptive force that seeps into the very fabric of professional identity. Given its "quasi-social" nature (Selenko et al., 2022), AI may disrupt established notions about social groups, work roles, and activities within professions (Strich et al., 2021). Whilst some point out that AI could eliminate entire job categories (Vu & Lim, 2022), others believe AI will bring about never-before-seen levels of productivity (Pizzinelli et al., 2023), and an overall favourable impact on people's professions and occupations that will strengthen rather than compromise individuals' professional identity (Jussupow et al., 2022).

Professional identity is an essential lens through which to view the changing interaction between AI and work in this turbulent technological landscape. Professional identity is defined as individuals' perceptions of their work roles and the alignment between identity and job tasks (Chen & Reay, 2021). Professional identity encompasses cognitive, emotional, and relational aspects that influence an individual's social roles, attitudes, and conduct within and beyond the professional context (Caza & Creary, 2016). This subjective construction is influenced not only by personal attributes but also by social interactions and group memberships (Gecas, 1982; Van Maanen & Barley, 1984). This social aspect is essential because individuals internalise role expectations and learn about their professional selves through interactions with others (Cooley, 1902; Roberts et al., 2005). Since it is rooted in a set of shared values and norms guiding professionals' actions and choices (Carminati & Heliot, 2021), as well as in the social recognition that work-related identities confer (Chen & Reay, 2021; Selenko et al., 2022), a person's professional identity is a crucial component of their sense of self in the workplace (Chen & Reay, 2021).

When this sense of self is altered by external forces, such as the implementations of AI technologies, professionals may engage in the multifaced process where individuals actively construct, adapt, signify, claim, and reject identities by utilising the resources available in their social context, that is defined as identity work (Brown, 2017). The implementation of AI may give rise to identity threats, which are

situations interpreted as suggesting potential harm to the value, meanings, or enactment of an individual's identity (Jussupow et al., 2022). Although professionals may engage in identity work to adjust to these shifts (Chen & Reay, 2021), the impact of implementing AI on their professional identity remains unclear. Identity conflict and identity enhancement are two results of the identity work process. They symbolise the possible negative and positive impacts of negotiating an individual's professional identity in relation to their values, beliefs, social expectations, and professional demands (Brown, 2014). As this thesis considers both the negative and positive aspects, it is also necessary to examine these two concepts in detail. Identity conflict arises when individuals perceive that their various identities do not align with their values, beliefs, norms, or demands (Carminati & Heliot, 2021). Identity enhancement, on the other hand, is the degree of complementarity and synergy among an individual's identities (Ramarajan et al., 2017).

Furthermore, little is still known of how the impact of AI on professionals' identity can differ across cultures, especially between Western and Eastern cultures. Firstly, although country-level factors significantly influence the pace and nature of technological changes and innovations, including AI adoption, their applicability to robotics and AI remains relatively unexplored (Lloyd & Payne, 2019; Vu & Lim, 2022). Secondly, the few existing studies on the topic have primarily focused on Western cultures. For instance, in research done by Lloyd and Payne (2019), the UK and Norway were compared. Similarly, Pizzinelli et al. (2023) conducted a cross-country analysis in the US, UK, South America, India, and South Africa, where they accounted for and compared Advanced Economies and Emerging Markets. And Vu and Lim (2022) conducted a cross-country comparative approach in 28 European countries. Thus, Eastern national cultures in relation to AI implementations have been mostly neglected.

Therefore, this study aims to address the gaps mentioned above by conducting a comparative case study between the Netherlands and South Korea, which are chosen as exemplary representatives of Western and Eastern cultures due to their significant cultural differences (Hofstede et al., 2010; Meyer, 2014). The Western part embodies values characterised by individualism and low power distance, whereas the Eastern part incorporates values characterised by collectivism and high-power distance (Chen et al., 2017; Hofstede, 2011). Given their antipodal cultural characteristics—e.g., low power distance versus high power distance, and individualistic versus collectivistic (Hofstede et al., 2010) — these two countries will serve as relevant representatives for this comparative case study.

The research question at the heart of this paper is:

"How does AI affect professional identity across various cultures?"

Following this main research question, the first sub-research question is:

"How does it affect the Netherlands, and how in South Korea?"

The second sub-research question into the nuanced perceptions surrounding these effects is:

"To what extent are these effects perceived as positive or negative?"

This study aims to bridge the gap in the literature by examining the relationship between AI and professional identity across different cultures. Recognising the multifaceted nature of AI's impact, this study attempts to clarify both the negative aspects of AI as well as any possible positive aspects that reinforce rather than weaken people's sense of self (Jussupow et al., 2022). By adopting a lens explicitly focused on South Korea and the Netherlands, this study aims to deepen our understanding of the cross-cultural variations in the impact of AI on professional identity and its perceived implications within a global context. From a practical perspective, this study aims to navigate the complex landscape of AI's influence on professional identity, providing valuable insights that inform policy development and implementation, ultimately harnessing AI's transformational potential to benefit work and society as a whole (Vu & Lim, 2022).

To answer the research questions, this paper proceeds as follows: first, it provides a thorough overview of the literature that explains the dynamics of AI and professional identity in different cultural settings and outlines the specific research problem underpinning this study. Secondly, the methodology used to explore the research questions is provided. Thirdly, the study's findings, along with their related theoretical and practical implications, are presented. Lastly, the paper concludes by addressing its limitations and outlining future research directions.

2. Theoretical Background

2.1. Artificial Intelligence (AI)

A variety of technologies are incorporated into AI, which aims to address issues that have historically required human cognition (Selenko et al., 2022). In addition to this definition, AI can be broadly defined as: "The ability of a machine to perform cognitive functions that we associate with human minds, such as perceiving, reasoning, learning, interacting with the environment, problem-solving, decision-making, and even demonstrating creativity" (Mirbabaei et al., 2022, p. 73/94). Advances in data accessibility, computing capacity, and sophisticated modelling techniques, notably machine learning, played a significant role in the growth of AI (Selenko et al., 2022; Jarrahi, 2018). One of the aspects that makes AI unique and warrants further exploration is its quasi-social agent nature, particularly in its ability to learn (He, 2024). AI is more than just a mechanical technology, as it possesses the capacity to adapt, improve, and acquire new knowledge through its learning abilities (Khan & Bose, 2021). AI is distinct from other technologies because of its capacity to learn, which also gives it the potential for autonomous decision-making and problem-solving (Owoc et al., 2021). Additionally, this ability to learn enables AI to mimic human intelligence and perform tasks that were previously only achievable by humans, such as image and voice recognition (Zhai et al., 2021).

AI has a wide range of effects, with implications varying across occupations and industries (Strich et al., 2021). Particularly in areas where narrow AI excels, it can supplement current jobs, replace human labour, or create entirely new roles (Selenko et al., 2022; Strich et al., 2021). Traditional jobs are challenged by the distinctive characteristics of AI, which include its capacity to replace entire processes, function autonomously, and learn dynamically. AI-driven automation may displace professionals, forcing them to perform tasks without human interaction and deal with results generated by opaque algorithms (Strich et al., 2021). Although concerns about job replacement persist, AI has the potential to enhance human labour, particularly in jobs that require sophisticated cognitive functions (Pizzinelli et al., 2023). In the medical field, for instance, AI applications are becoming increasingly popular for tasks ranging from diagnosis to treatment planning. Opinions on these applications vary from optimism about improved clinical outcomes to pessimism about human obsolescence (Oh et al., 2023).

Moreover, the categorisation of AI into three categories —narrow, general, and superintelligence — highlights its transformative potential across industries (Mirbabaie et al., 2022). Although narrow AI is currently used for most applications and excels in specific tasks, the possibilities of general and superintelligence raise essential considerations regarding the nature of work and human-machine collaboration in the future. As AI becomes integral to an organisation's decision-making strategy, its

widespread impact is changing work environments and tasks across various sectors (Mirbabaie et al., 2022). In this thesis, narrow AI is specifically considered, as it is the predominant form of AI used today (Mirbabaie et al., 2022). Narrow AI is designed to excel within well-defined domains, like image recognition, natural language processing, and predictive analytics. It is opposed to general AI, which mimics human-level learning and cognition (Mirbabaie et al., 2022; Selenko et al., 2022). According to Mirbabaie et al. (2022) and Oh et al. (2019), narrow AI is highly valuable in various industries, including healthcare, finance, and manufacturing, due to its ability to outperform humans in narrow tasks, its rapid processing capabilities, and its scalability. However, the spread of AI also raises concerns about job displacements and professional identity, as tasks once performed by humans are increasingly delegated to automated systems (Strich et al., 2021).

Furthermore, the emergence of narrow AI has reshaped the landscape of various professions, especially in the medical field, where AI systems are being used more and more for tasks such as medical imaging analysis, patient diagnosis, and treatment recommendations (Oh et al., 2019). These AI-driven solutions have the potential to enhance patient outcomes by increasing the accessibility, accuracy, and efficiency of healthcare delivery (Oh et al., 2019; Pizzinelli et al., 2023). However, there are also some ethical and regulatory issues associated with using narrow AI in healthcare, particularly regarding patient privacy, data security, and algorithmic bias (Pizzinelli et al., 2023; Strich et al., 2021). Medical professionals have to navigate these challenges in order to maintain their professional autonomy and ensure patient-centred care (Strich et al., 2021). Beyond healthcare, narrow AI is transforming industries such as finance and manufacturing. Algorithms driven by AI are used in finance to perform activities such as algorithmic trading, risk assessment, and fraud detection. Although these systems facilitate faster and more accurate decision-making, they also pose challenges related to systemic risk and algorithmic bias (Selenko et al., 2022). Similar to this, narrow AI in manufacturing enables quality control, predictive maintenance, and process optimisation, leading to increased productivity and cost savings. Nonetheless, concerns arise regarding job displacement and the need for upskilling the workforce to adapt to AI-driven production environments (Mirbabaie et al., 2022).

As AI continues to reshape different industries, its impact on professional identity becomes increasingly significant. It is therefore essential to look more closely at how individuals perceive and adapt their definition of themselves to these technological advancements in their respective fields.

2.2. Professional Identity

Professional identity encompasses the intricate web of meanings, roles, and affiliations through which individuals define themselves within the context of their work. It intertwines with social and personal identities to create a tapestry that represents both group membership and individual perception (Caza

& Creary, 2016). As defined by Jussupow et al. (2022, p.2), professional identity provides answers to the fundamental question of "Who am I as a professional?". It is a composite image of oneself that includes both the enactment of a professional role and a sense of belonging as a member of a specific profession (Chen & Reay, 2021). Through intricate processes of education, socialisation, and experience, professionals create their identities (Strich et al., 2021). This entails defining oneself in respect to the goals, values, and norms of the profession, as well as in reference to the work of others within the same field (Chen & Reay, 2021). Professional identity serves as a crucial cognitive mechanism, influencing attitudes, affect, and behaviour within work settings and beyond. It gives work meaning and purpose, providing individuals with a framework to understand their roles and contributions to society. Additionally, it can give a feeling of efficacy and esteem, which can contribute to psychological well-being (Caza & Creary, 2016). Professional identity is shaped by personal experiences as well as interactions with peers and colleagues (Strich et al., 2021).

The interconnection between one's self-view and the nature of their work is fundamental to professional identity (Chen & Reay, 2021). Professionals often use their jobs to define who they are, reflecting the close relationship between identity and work roles (Pratt et al., 2006). This linkage offers stability, as changes to one's professional role frequently result in adjustments to one's self-perception as well (Chen & Reay, 2021). This stability is not absolute, though. Because professional education involves an extensive socialisation process, a professional's identity is typically resistant to change. Nonetheless, it is not impervious to external influences (Chen & Reay, 2021). Professionals may react defensively to preserve the status quo when they perceive alterations to their work environment or processes as a threat to their professional identity (Strich et al., 2021). Conversely, professionals who see changes that align with their values and aspirations may be more open to adapting their identities in order to accommodate new roles and responsibilities (Chen & Reay, 2021). A significant aspect of professional identity lies in the shared values and norms within a professional community. Professionals often adhere to specific ethical principles and standards that guide their behaviour and decision-making (Carminati & Heliot, 2021). For example, physicians adhere to principles of non-maleficence, beneficence, respect for patient autonomy, and justice in their clinical practice. Because they shape how professionals view their roles and responsibilities within their respective fields, these values not only define the profession but also play a role in the construction of individual professional identities (Carminati & Heliot, 2022).

Furthermore, it is possible to view professional identity as a dynamic construct that evolves over time in response to changing circumstances and experiences (Chen & Reay, 2021). Professionals continually negotiate and modify their identities throughout their careers, despite professional socialisation establishing a foundation for identity formation (Carminati & Heliot, 2023). This ongoing process of

identity negotiation can occur in various settings, including interactions with colleagues, encounters with patients or clients, and exposure to new technologies or organisational structures (Chen & Reay, 2021).

2.3. Negative vs. Positive Perspectives on AI

As we explore the impact of AI on professional identity, it is essential to consider both the positive and negative perspectives that arise from the integration of AI technologies in the workplace. The effects of AI on the evolving landscape of work have far-reaching and complex consequences for professional identity, such that the integration of AI into professional domains poses both challenges and opportunities that impact individuals' sense of self and their place within their respective fields.

2.3.1 Negative Perspective

AI disturbs not only the workflow but also the very fabric of professional identity when it encroaches upon tasks traditionally performed by humans. The displacement of tasks by AI can disrupt the continuity of self-understanding and erode the fulfilment derived from professional roles (Selenko et al., 2022). This disruption may lead to feelings of alienation, as decisions made by opaque AI systems may be viewed as arbitrary or lacking in contextual understanding (Strich et al., 2021). Additionally, if decisions are perceived as being made without appropriate contextual information or if they are perceived as incorrect or arbitrary, they may not be trusted (Raisch & Krakowski, 2021). Furthermore, the social dynamics of work are altered when AI assumes human roles, making it more challenging to validate existing professional identities. Workers confronted with significant changes to their roles face the greatest challenge to their sense of identity (Selenko et al., 2022). In addition, the prevailing discourse surrounding AI tends to be divided between optimists and pessimists, with each contributing to a climate of uncertainty and instability (Jussupow et al., 2022). Because individuals are juggling conflicting narratives about the future of work, this kind of polarisation can exacerbate identity threats. Consequently, in order to successfully navigate the changing landscape of AI-driven work, efforts in organisational sensemaking and collaborative role redefinition become crucial (Selenko et al., 2022).

2.3.2 Positive Perspective

On the other hand, opportunities for identity expansion and adaptation arise from the incorporation of AI into professional domains. Workers may acquire new skills and competencies by engaging with AI technologies, thereby expanding their professional identities beyond traditional boundaries (Lanzolla et al., 2020). This process of adaptation is facilitated by the creation of transitional spaces for learning and competency gain, enabling workers to embrace new self-understanding aligned with evolving job roles (Jha & Topol, 2016). Furthermore, workers will find it easier to change their identities, and the replacement will be more widely accepted if AI replaces some tasks and helps them

move closer to their desired identities (Selenko et al., 2022). Moreover, the ability to complement human abilities creates opportunities for collaborative partnerships that enhance productivity and job satisfaction (Mirbabaei et al., 2022). Organisations can mitigate resistance behaviours and promote individual acceptance by presenting AI as a starting point and supportive collaborative technology, thereby fostering a positive association with AI (Mirbabaei et al., 2022). This collaborative approach emphasises the symbiotic relationship between humans and technology, where identity formation and the integration of AI as a necessary component for work are intertwined (Mirbabaei et al., 2022). In essence, organisations can support identity expansion and adjustment to the changes brought about by AI integration by establishing liminal spaces for people to engage in learning and identity restricting (Selenko et al., 2022).

2.4. Identity Work and Construction

Regardless of the positive or negative influences of AI on professionals' identity, professionals will need to engage in identity work. Identity work is the multifaceted process by which individuals actively construct, adapt, signify, claim, and reject identities using the resources available in their social context (Brown, 2017). This notion aligns with the definition of 'identity work' provided by Pratt et al. (2006), who define it as the active construction of identity within social contexts. Identity work encompasses several equivalents, including identity construction, identity quests, bricolage, and identity projects; however, the term 'identity work' has become widely recognised in organisational and management studies (Brown, 2014). Still, scholars differ on the core aspects of identity, including whether such activities are habitual or intentional, and whether they are tacit or explicit in response to perceived identity disruptions or role transitions (Brown, 2017).

Overall, individuals are essentially depicted as strategic agents negotiating their identities through the complexities of modern organisational life, continually engaging in efforts to create, maintain, repair, display, revise, and discard social, personal, and role identities (Brown, 2014/2017). This dynamic process extends into the domain of identity construction, where individuals form their subjective perceptions of themselves within their professional roles (Bentley et al., 2019). In contrast to the traditional concepts of professional identification, which emphasise the perception of unity with a profession, professional identity construction highlights the active role individuals play in interpreting and transforming their self-identity (Caza & Creary, 2016). According to this perspective, individuals actively participate in forming their professional identity by engaging in cognitive and behavioural identity work to align their self-views with the expectations of their professional roles (Pilarska, 2014). Socialisation emerges as a critical mechanism that shapes professional identity construction, facilitating the internalisation of professional norms, values, behaviours, and attitudes. Individuals form attachments to their professional groups and learn to navigate the demands of their professional

roles through socialisation (Caza & Creary, 2016). Furthermore, the degree to which individuals identify with their professional role is influenced by the selective nature of their professions, with more selective professions fostering stronger professional identities (Bentley et al., 2019).

In general, identity work and professional identity construction highlight how individuals' identities are shaped and maintained through a dynamic interplay between their social contexts. Active negotiation, adaptation, and reinterpretation are integral to these processes, which are influenced by a range of factors, including socialisation, role transitions, and organisational values.

2.5. Identity Conflict and Enhancement

Two outcomes of the identity work process are identity conflict and identity enhancement. They represent the potential negative and positive impacts, respectively, of negotiating one's professional identity in relation to personal beliefs, values, social expectations, and professional demands (Brown, 2014). As mentioned in the introduction, this thesis examines the potential negative and positive impacts of AI on professional identity, so these two concepts are essential to discuss.

Identity conflict arises in the context of professional roles when individuals perceive that their various identities do not align with their values, beliefs, norms, or demands (Carminati & Heliot, 2021). It is characterised by a sense of clashing between different aspects of oneself, which may cause uncertainty regarding which identity should be prioritised in decision-making and action (Carminati & Heliot, 2021; Carminati & Heliot, 2022). These values, which form the foundation of individuals' identities, are deeply intertwined with emotions and play a significant role in shaping behaviour (Carminati & Heliot, 2022). Identity conflict has more negative effects than just cognitive dissonance. Research indicates that maintaining a complex and meaningful sense of self is essential for individuals' psychological well-being, and doing so requires acknowledging and addressing this conflict (Carminati & Heliot, 2021). Psychological well-being includes the fulfilment of one's potential and a meaningful life despite facing critical challenges (Chen et al., 2017). For instance, in the medical field where, as aforementioned, professional identity is particularly salient, conflicting values stemming from personal and professional identities have been identified as significant sources of burnout, stress, and emotional strain among physicians (Carminati & Heliot, 2021). Identity conflict has a significant negative influence on well-being, as evidenced by the fact that physicians are twice as likely as the general population to report having poor mental health (Wallace & Lemaire, 2007). Larger social and organisational contexts influence identity conflict and are not limited to an intrapersonal experience. These contexts shape individuals' attitudes and behaviours, which may either lessen or increase identity conflict. For example, conflicts between organisational units can further complicate identity dynamics by

introducing conflicting expectations and values held by different groups or individuals (Carminati & Heliot, 2023).

Conversely, identity enhancement refers to the degree of complementarity and synergy among an individual's identities, as described by Ramarajan, Rothbard, and Wilk (2017). It is the feeling that one is whole and complementary in oneself (Brook et al., 2008; Cast & Burke, 2002). James (1890, p. 282) described this psychological experience of enhancement as a "harmonious division," which validates multiple sets of meanings, values, and behaviours of the self (Dutton et al., 2010; Greenhaus & Powell, 2006; Rothbard & Ramarajan, 2009). As people get energy from their identification with various roles, groups, and relationships, identity enhancement can create motivational resources (Creary et al., 2015; Marks, 1977; Rothbard, 2001; Thoits, 1983). Additionally, because cognitive resources are not being allocated to identity concerns, they may be better utilised for task performance (Baumeister et al., 1988; Hirsh & Kang, 2016). In addition, Ramarajan (2014) expands on identity enhancement by proposing that individuals benefit from multiple role identities by utilising the skills, knowledge, positive emotions, and resources that arise from the intersections of different roles. Having multiple work identities provides greater flexibility and the ability to fulfil numerous work demands (Caza & Wilson, 2009).

In conclusion, identity conflict has two distinct outcomes which are identity conflict and identity enhancement. While the latter may promote resilience and motivation, the former can lead to severe stress and burnout, particularly in high-stakes professions such as medicine. These dynamics are essential for understanding how AI may potentially impact professional identity, as the technology can both exacerbate existing conflicts and create new opportunities for enhancement. Therefore, these concepts lay the groundwork for exploring the notion of identity threat and potential coping mechanisms.

2.6. Identity Threat and Coping Responses

While identity work entails actively constructing and maintaining one's professional identity, it is equally important to understand how individuals react when these identities are challenged by identity threat. Identity threat refers to experiences viewed as potentially harmful to one's sense of self or professional standing. These threats have the potential to reduce identity value, erode its components, or disrupt the connection between the identity and its associated meaning (Jussupow et al., 2022). Research by Petriglieri (2011) defines identity threats as experiences that are appraised as indicating potential harm to values, meanings, or the enactment of an identity. In this appraisal process, the relevance of an experience for an individual's wellbeing is assessed, along with the possible harm to their identity that may result from it (Petriglieri, 2011). Jussupow et al. (2022) distinguish between

personal identity threat and professional identity threat in the context of professional identity. Personal identity threats challenge fundamental self-motives, including distinctiveness, continuity, self-efficacy, and self-esteem. This may result in biased information processing, adverse emotional reactions, and avoidance of threatening information. Threats to professional identity, for example, in medical professions, can take many forms. These include threats to medical professionals' expertise and status, which undermine their professional recognition, as well as threats to their professional capabilities, which relate to the enactment of roles associated with medical work itself (Jussupow et al., 2022). For instance, Mirbabaie et al. (2022) discuss how professionals may experience high identity threat as a result of emerging technologies, which can lead to perceived loss of status position.

Additionally, as Petriglieri (2011) notes, challenges to professional capabilities might lead to a decrease in individual performance and reluctance to embrace change. Studies also indicate that threats to a professional may cause resistance to organisational change and new technologies, especially in the healthcare sector (Jussupow et al., 2022; Petriglieri, 2011). The impact of identity threat is also associated with a loss of self-esteem and a perceived decrease in social status (Mirbabaei et al., 2022). A higher level of identity threat is a result of the perceived effects of evolving technologies on work and the loss of status and position. This threat may lead to actions aimed at protecting self-esteem, which could impact attitudes toward technological changes (Mirbabaei et al., 2022).

According to Petriglieri (2011), identity threats can have various consequences, such as reduced self-esteem, decreased individual performance, and reluctance to change. The process of assessing threat involves determining the significance of an experience to one's well-being and the potential harm it may pose to one's identity. This appraisal process is influenced by the importance of the identity in question and the frequency of exposure to threatening experiences (Petriglieri, 2011). These identity threats take unique significance in the context of AI. Given their ability to learn, adapt, and make decisions, AI systems may potentially pose a threat to professional identities, especially in fields where AI technologies are being increasingly implemented (Caldwell, 2022).

Furthermore, identity threats can originate from various sources, such as individual actions, interactions with others, and external events. Individual-level threats may stem from identity conflicts or actions that contradict one's professional identity. Interpersonal interactions or judgments from ingroups and outgroups can also pose threats to identity. In addition, societal beliefs or traumatic events in the material world may also be a source of threat (Petriglieri, 2011). In response to these identity threats, individuals may use coping strategies to protect their professional standing or sense of self. These strategies may include identity protection responses, adaptation of professional identity, or deliberate attempts to block organisational change efforts (Jussupow et al., 2022). Given our

understanding of these coping strategies, for example, this study can add to the literature by exploring whether and how these are applied in the context of AI-induced identity threats.

2.7. Different Cultures: the Netherlands and South Korea

In exploring the impact of AI on professional identity, it is imperative to consider how cultural factors shape these dynamics, particularly given the significant differences between Western and Eastern cultures in terms of values, societal structures, and technological adaption (Lloyd & Payne, 2019; Vu & Lim, 2022; Hofstede et al., 2010; Meyer, 2014). This cultural comparison is essential, as aforementioned, there is little known about how the impact of AI on professionals' identity can differ across cultures, specifically between the Western and Eastern parts of the world. Due to their contrasting cultural characteristics, South Korea and the Netherlands were chosen as comparative case studies to represent Eastern and Western cultural contexts, respectively (Hofstede et al., 2010; Meyer, 2014).

To compare these countries, Hofstede's Cultural dimensions (2010) and Meyer's Culture Map (2014) are used to provide a structured yet complementary analysis. Hofstede's model helps identify broad, quantifiable patterns, such as uncertainty avoidance and individualism versus collectivism, which help explain how professionals from different cultural contexts may react to the integration of AI (Keith, 2013). However, his model also received substantial criticism. According to scholars, it implies cultural homogeneity within countries, simplifies complex national cultures, and is based on data gathered decades ago from a single company, IBM (Kirkman et al., 2006; Jones, 2007; Shaiq et al., 2011). Because these etic approaches, which use the same external framework across cultures, frequently impose predefined categories that carry the risk of misrepresenting culturally ingrained meanings, they can obscure local complexity and dynamic identity work (Sinha, 2005).

As a consequence, Hofstede's model is applied cautiously to indicate structural tendencies. Meyer's Culture Map (2014) complements Hofstede's dimensions by providing a more qualitative, practice-based lens. Meyer emphasises culturally embedded communication, trust, and decision-making patterns through the use of narrative case studies and interviews. Although her approach is more subjective and less empirically supported, it provides a deeper understanding of interpersonal dynamics and contextual depth (Meyer, 2014), which is especially helpful when examining professional experiences with AI in diverse cultural settings. When combined, these frameworks provide a balance of interactional and structural insights. This study recognises the value and limitations of these models in understanding how culture shapes professional identity work around AI by combining Meyer's micro-level nuances with Hofstede's macro-level perspective. Meyer's framework provides insight into interpersonal dynamics, including communication, trust, and decision-making, all of which can

influence how AI impacts professional roles, task delegation, and authority structures. Hofstede's model, on the other hand, provides a broader lens for understanding cultural predispositions, such as openness to or resistance to AI integration. When combined, these perspectives enable a culturally informed understanding of how professionals negotiate their identities in response to AI implementation.

2.7.1. Hofstede's Cultural Dimensions

According to Hofstede (2011, p.3), culture is defined as "the collective programming of the mind that distinguishes the members of one group or category of people from others.". Hofstede's dimensions reveal that the Netherlands scores low on the Power Distance dimension (38), indicating a society that values equality and expects power to be distributed more evenly. This is evident in Dutch professional environments where hierarchy is downplayed, and subordinates are encouraged to be proactive and express dissenting opinions. By comparison, South Korea scores higher on this dimension, with a score of 60. This implies a more hierarchical society in which authority is respected, and challenging superiors is less common (Hofstede, 2011). Another area of considerable difference between these two cultures is the contrast between individualism and collectivism. The Dutch culture has a high score for individualism (100), emphasising individual rights and personal achievements. This creates an environment where professionals are expected to be self-reliant and personal accomplishments are celebrated (Hofstede, 2011).

On the other hand, the collectivist culture of South Korea places greater emphasis on community loyalty and group harmony, which frequently leads to a work environment where group consensus and cooperation are crucial (Hofstede, 2011). When it comes to Uncertainty Avoidance, both countries show a preference for avoiding ambiguity. According to Hofstede (2011), the Netherlands has a moderate score of 53, indicating a balanced approach to risk and change that enables innovation while maintaining a level of security. The higher score of 85 for South Korea suggests a society that is less tolerant of uncertainty, which often results in strict rules and a reluctance to deviate from established procedures (Hofstede, 2011). This could have an impact on how AI is integrated into professional settings.

2.7.2. Meyer's Culture Map

Meyer's Culture Map further explains these differences. Dutch professionals are known for their direct communication style, which values clarity and brevity, aligning with their preference for low-context communication (Meyer, 2014). Messages are communicated and interpreted at face value, and repeating them is appreciated if it makes the message clearer. This may lead to a direct exchange of ideas in professional settings. South Korea, in contrast, has a tendency to rely on high-context

communication, in which it is essential to understand non-verbal cues and “read between the lines” (Meyer, 2014). Effective communication is nuanced, multi-layered, and often relies on subtle subtext. An interesting fact is that the more educated and sophisticated individuals are, the more likely they are to adopt an extreme version of the dominant cultural tendency.

Furthermore, the Evaluating scale indicates that the Netherlands provide negative feedback in a direct matter. This means that when giving a colleague negative feedback, it is done in a frank, honest, and blunt way. Positive messages do not mitigate negative ones, and they stand alone. When criticising, absolute descriptors like “totally inappropriate” and “completely unprofessional” are often used. Additionally, an individual may receive criticism in front of a group.

In contrast, in South Korean culture, negative feedback is provided subtly, diplomatically, and softly, with negative messages often wrapped in positive ones. Criticising is frequently done using qualifying descriptors, and criticism is only offered in private. Another scale on which the Netherlands and South Korea are notably different is the leading scale. The Netherlands is egalitarian, which means that there should be little distance between the boss and the subordinate, and communication often transcends hierarchical lines. South Korea is hierarchical, just like many other East Asian cultures, which is explained by the Confucian heritage of these countries. In these cultures, status is highly valued, and there is a significant distance between the boss and their subordinates. The organisational structures are rigid, with multiple layers and established hierarchical pathways of communication.

Additionally, the Dutch highly value consensual decision-making, which aligns with their egalitarian culture. On the other hand, cultures classified as hierarchical on the Leading scale follow a top-down decision-making approach. In a consensual culture, decision-making may take some time because everyone is involved in the process. Since everyone has fully embraced the decision and it is set in stone, its implementation happens relatively quickly after it is made. As a result, the decision-making process is highly consequential, and it begins and ends with careful consideration.

In contrast, a single individual bears the responsibility for making decisions in a top-down society. Decisions are typically made fast, early in the process, and by one person, probably the boss, in this type of culture. However, every choice is also negotiable. Decisions are easily revisited or changed when more discussion occurs, additional information becomes available, or opposing viewpoints emerge. On the trusting scale, the Netherlands is task-based while South Korea is relationship-based. In Confucian societies, such as China, Korea, and Japan, maintaining face for each team member is crucial for preserving group peace, and trust is built through slowly developing relationships over the long term. The Netherlands, on the other hand, trust and relationships can be formed quickly and dropped easily, depending on the situation's needs. Meyer’s research also looks at how the two

cultures approach scheduling, which is another area of difference. The Dutch have a stronger emphasis on linear time and adhering to strict deadlines and schedules, which puts an emphasis on punctuality and adherence to time. Conversely, South Koreans seem to have a more flexible attitude towards time. Lastly, for the disagreeing scale, the Dutch are more confrontational, whereas the South Koreans rather avoid confrontation (Meyer, 2014).

Given the complex interplay between AI implementation and professional identity, this theoretical background highlights two critical research gaps: the potential influence of AI on professional identity and whether the perception of AI differs across cultures. By bridging these gaps, the section that follows will examine the research methods employed in the comparative case study between South Korea and the Netherlands, with the goal of clarifying how cultural contexts influence professionals' responses to AI implementation and its impact on their identities.

3. Methods

3.1. Research Design

This thesis adopts a comparative case study approach, utilising an inductive, qualitative research design to investigate how AI is affecting professional identity within the medical field across South Korea and the Netherlands. This approach is chosen to facilitate the discovery of nuanced insights into the perceived positive and negative impacts of AI on professional identity, an area that remains relatively unexplored (Jussupow et al, 2022). Professionals' reactions to the introduction of AI developments in various sectors, including radiology, have highlighted the need to move beyond binary views and consider the impact of AI on professional roles and identities (Chen et al., 2021). Since the inductive approach does not limit the research to predetermined theories or frameworks, it is particularly relevant for this study, as it allows insights to emerge directly from the data itself (Thomas, 2006). It enables us to generalise findings from specific observations into a broader context (Woo et al., 2017), which aligns closely with this thesis, as it focuses on the influence of AI on professional identity across different countries. In addition, qualitative research is particularly suited for this thesis as it enables an in-depth understanding of complex phenomena through the collection of rich, contextual data (Eisenhardt, 1989; Yin, 2014). This thesis aims to elucidate the underlying mechanisms by which AI can influence professional identity by comparing the experiences of medical professionals in two distinct cultural and technological contexts. A more thorough understanding of the global implications of AI in professional settings will be made possible by the cross-national comparison's ability to identify both universal and location-specific patterns (Bartlett & Vavrus, 2017).

3.2. Data Collection & Sampling of Participants

Now that the research design has been clearly explained, we will delve into how the data for the research was collected. This study employed a comparative case study approach, focusing on medical professionals in South Korea and the Netherlands, to investigate the impact of AI on professional identity within the medical sector. In a comparative case study, the macro, meso, and micro levels of a case are examined simultaneously. It allows researchers to trace connections between various sites or scales and to compare and contrast different aspects of cases. This approach serves as a heuristic tool, facilitating the identification and resolution of problems through thorough comparison and analysis (Bartlett & Vavrus, 2017). This approach is particularly relevant for this research, as it enables a comprehensive analysis of how AI affects professional identity in diverse cultural contexts, providing a nuanced understanding of the variations in these effects across countries. A comparative case study offers essential insights that a traditional case study approach would miss, as it explores the complexities of AI's impact on professional identity and evaluates the varying perceptions of these

effects (Bartlett & Vavrus, 2017). However, conducting a case study can be resource-intensive, challenging to manage, and presents challenges when it comes to controlling for variables, which could result in bias and limitations in the analysis (Bartlett & Vavrus, 2017).

Especially in the medical field, the emergence of AI is reshaping the roles of healthcare professionals, particularly pathologists and radiologists who work with digital data (Turnsunbayeva & Renkema, 2022). A study on the awareness of AI among Korean doctors found that group boundaries in the medical field are very rigid and are primarily determined by core values and ideas. Because of this, medical professionals can be seen as a prototypical profession, and their professional identity is remarkably resilient to change (Jussupow et al., 2022). Professions based on specialised knowledge, such as medicine, face particular challenges when AI performs tasks like diagnosis and treatment recommendations (Jussupow et al., 2022; Pratt et al., 2006). As shown by Oh et al.'s (2019) research, the majority of Korean doctors acknowledge the potential of AI in diagnostic and treatment processes and generally have positive opinions about its use. However, rather than examining how such developments may shape, disrupt, or reinforce medical professionals' sense of self, their study mainly concentrated on general attitudes and perceived usefulness. Therefore, even while their research provides valuable insights into doctors' acceptance of AI, it fails to address the more profound identity-level implications of AI integration, a gap that this research seeks to explore further.

A purposive approach was employed to ensure a diverse range of medical professionals, recognising the varied roles within the medical sector. This approach provides a comprehensive understanding of the AI's impact on various specialisations. The initial plan included interviewing a total of sixteen professionals, eight from each country. This sample size was informed by the work of Guest et al. (2006), which indicates that data saturation can often be reached with twelve interviews. Furthermore, Saunders et al. (2007) state that for most qualitative research, a sample size of five to thirty participants is sufficient. In practice, this target was achieved, although not with eight professionals from each country.

Furthermore, the interviews were initially conducted with medical professionals working at academic hospitals. However, due to the difficulty of recruiting participants from academic hospitals in the Netherlands, it was also decided to include professionals from general hospitals. The sample ultimately included ten medical professionals who worked at academic hospitals, and six worked at general hospitals.

The recruitment of participants was conducted from July 2024 to March 2025. Potential participants were contacted through direct LinkedIn messages, emails to hospitals, and postings in relevant Facebook groups. Over 60 Dutch and 50 South Korean professionals were contacted. Despite these

efforts, the response rate remained relatively low. To address this, snowball sampling was also utilised, in which some participants referred colleagues who were eligible and willing to participate. Interestingly, one participant, originally from Italy, had professional experience in both South Korea and the Netherlands, offering a valuable cross-cultural perspective.

To provide context for the findings, it is essential to outline the demographics of the sample, as presented in Table 1. The participants varied in age (ranging from 25 to 64 years), gender, and years of experience (from 6 to over 20 years). The positions included clinical professors, head and neck surgeons, surgical oncologists, and technology and health nurse specialists. The sample thus reflected a wide diversity of medical specialities and backgrounds, resulting in considerable variation across participants. This diversity enabled a more comprehensive understanding of how AI affects various professional realities and enhanced the richness of the data. At the same time, such heterogeneity may have contributed to a more generalised view, potentially overlooking specific nuances associated with individual specialisations. Nevertheless, considering the exploratory nature of this study and the scarcity of previous research on the relationship between AI and professional identity, especially in cross-cultural contexts, this varied sample offers valuable preliminary insights into familiar patterns and concerns across the medical field.

Table 1 Overview of Participants

Participation ID	Job title	Years of experience	Country	Gender	Age
NL01	Nurse, health and technology	6 - 10 years	Dutch	Male	25-34
NL02	Head and neck surgeon	More than 20 years	Dutch	Female	55-64
NL03	Surgical oncologist	6 – 10 years	Dutch	Male	45 – 54
NL04	Medical specialist	More than 20 years	Dutch	Male	45 – 54
NL05	Clinical informaticist	6 – 10 years	Dutch	Male	55 - 64
NL06	Anaesthesiologist	More than 20 years	Dutch	Male	55 – 64
NL07	Trauma surgeon	6 – 10 years	Dutch	Male	35 - 44
NL08	Physician Researcher	2 – 5 years	Dutch	Female	25 - 34
NL09	Assistant professor in general practice education/general practitioner	More than 20 years	Dutch	Female	65+
NL010	Doctor	2 – 5 years	Dutch	Male	25 – 34
NL011	Anaesthesiologist-Intensivist	2 – 5 years	Dutch	Male	35 - 44
NL012	Anaesthesiologist-Intensivist	More than 20 years	Dutch	Male	55 - 64
NL013	Pathologist	6 – 10 years	Dutch	Female	45 – 54
NL014	Pathologist	11 – 15 years	Dutch	Male	45 – 54
SK01	Clinical assistant professor/Interventional neuroradiology	6 – 10 years	South Korean	Male	35 – 44
BC01	General surgeon	2 – 5 years	Italian	Female	25 – 34

Despite the study's intention to include a balanced sample of participants from both the Netherlands and South Korea, as mentioned earlier, only one South Korean professional was eventually recruited. Although extensive outreach was conducted through hospitals, professional networks, and LinkedIn, the recruitment process proved challenging. As a result, data saturation was not achieved for the South Korean context. The insights from this participant are still part of this analysis, although they are

cautiously interpreted. Their contributions are occasionally reflected in the data structure. However, due to the lack of cross-cultural representation, these findings should not be generalised to the broader South Korean healthcare sector.

3.3. Research Instruments

The data was collected from the sample through a qualitative research approach, using open-ended written responses and semi-structured interviews, to investigate how AI affects professional identity in the medical fields of the Netherlands and South Korea. Two distinct types of research instruments were used. The South Korean participant was given an open-ended written questionnaire because the researcher's lack of fluency in Korean made it challenging to conduct in-depth interviews and accurately interpret nuanced responses. In contrast, Dutch medical professionals participated in semi-structured interviews.

The Korean medical professionals were interviewed through open-ended written responses on Qualtrics (see Appendix A2). This method is chosen to accommodate the expected linguistic preferences of South Korean medical professionals, who could face challenges in participating in English-spoken interviews. In addition to this, giving the South Korean medical professionals the opportunity to express themselves in their mother tongue allowed them to express themselves as well as possible. Initially, the open-ended questions were to be translated into Korean by native South Koreans. In this way, the participants could articulate their perspectives at their convenience, ensuring thoughtful and reflective engagement with the research questions (Kreienbrinck et al., 2024). However, eventually this was not needed as the only South Korean participant preferred to answer their open-ended written questions in English. The research instruments consisted of a set of open-ended questions designed to elicit comprehensive insights into how professionals perceive AI's impact on their identities. The theoretical framework of professional identity and AI served as the foundation for these questions. The purpose of the questions is to capture the participants' perceptions of AI's impact, both positive and negative. Participants were encouraged to provide detailed narratives of their experiences and viewpoints. To facilitate the analytical process, the written work was gathered. The transcription process ensured adherence to rigorous standards to maintain the integrity of the participants' expressions (Kvale & Brinkmann, 2009). Participants' identities were anonymised through the use of coded identifiers, as privacy and confidentiality are of the utmost importance. This measure enables apparent reference within the study while maintaining respondents' anonymity (Polkinghorne, 2005). Given the exploratory nature of the research and the need for a nuanced understanding of the subject matter, the study's emphasis on depth over breadth is reflected in the preference for written responses over traditional survey methods (Maxwell, 2012).

The research instrument for Dutch medical professionals was structured interviews (see Appendix A1), a standard method in qualitative research and a frequent data source in health research (George, 2023; Magaldi & Berler, 2020; De Jonckheere & Vaughn, 2019). Semi-structured interviews provide the interviewer flexibility and depth, facilitating a detailed exploration of complex issues (George, 2023). They are composed of several key questions that define the areas to be explored, while simultaneously allowing the interviewer to deviate to delve deeper into an idea or response (Gill et al., 2008). Furthermore, it facilitates a dialogue between the participant and the researcher, supported by comments, follow-up questions, and probes in addition to a flexible interview protocol (DeJonckheere & Vaughn, 2019). These interviews were semi-structured, which allows for a deep dive into personal and sensitive issues as participants' thoughts, feelings, and beliefs about a particular topic are explored (DeJonckHeere & Vaughn, 2019). For the Dutch medical professionals, a set of open-ended questions was prepared based on the goals of this thesis. These questions functioned as a guide, with the sequence and phrasing remaining flexible to facilitate a natural flow of conversation (George, 2023). With this approach, rich and detailed data were collected to shed light on how AI is perceived and how it influences professional identity. For conducting the semi-structured interviews, video conferencing via Teams was used. To ensure accuracy in data analysis, every interview was meticulously recorded and transcribed. The data was then analysed using thematic analysis, a method that identifies, analyses, and reports patterns within the data (Braun & Clarke, 2006). This will be discussed in the following paragraph.

3.4. Data Analysis

The present thesis employed a Thematic Analysis approach, as described by Braun and Clarke (2006), coupled with the Gioia methodology for data organisation (Gioia et al., 2013), to rigorously analyse the data. Thematic Analysis is a flexible and robust method that excels in identifying patterns in datasets while analysing qualitative data. This method facilitates a dynamic analytical process, divided into six iterative phases. To obtain a thorough understanding, phase one initially involved transcribing the Dutch interviews and immersing oneself in the data. As mentioned earlier, the South Korean written interviews would initially be translated by native South Koreans, as opposed to Chat GPT or a translation software. This would help ensure that the underlying meanings and values are not lost in translation. As the South Korean participant preferred to provide their answers in English, this translation was no longer needed. This initial stage lays the groundwork for further analysis. Phase two involved first creating codes that correspond with the first-order concepts explained by Gioia et al. (2013). To maintain the authenticity of the participants' perspectives, the coding process closely adhered to their verbatim phrases. After that, these codes were compiled into themes for phase three, which correspond with the second-order themes proposed by Gioia et al. (2013). This phase is crucial

for identifying overarching patterns related to the shifts in professional identity within the medical sector that are attributed to AI. Phase four involved a thorough review of these themes to ensure they are coherent and in line with the research questions. These themes were refined, distinctly defined, and aptly named in Phase Five, which laid the groundwork for the creation of aggregate dimensions in Phase Six. These dimensions elevated the analysis to a theoretical level, capturing the complex ways in which AI affects professional identity in the contrasting cultural contexts of the Netherlands and South Korea. The integration of findings into the thesis's broader narrative signals the conclusion of this analytical journey. The insights obtained from this comparative case not only added to the body of knowledge on AI's impact on professional identity but also provided a framework for assessing the perceived positive and negative impacts of the technology across diverse healthcare systems.

4. Results

Following the Gioia methodology, this chapter presents the study's findings based on a grounded analysis of interview data. The findings are structured around the aggregated dimensions, namely "mistrust in AI" and "AI-identity work." Within each aggregate dimension, the corresponding second-order themes and their underlying first-order concepts are discussed in detail. The data structure below uses quotes that have been paraphrased to represent first-order concepts. However, to demonstrate the authenticity and the richness of participants' perspectives, illustrative quotes are used verbatim in the chapter's narrative. These results shed light on how medical professionals experience and reflect on the growing presence of AI in their work, and how this shapes their perceptions of professional identity, responsibility, and values.

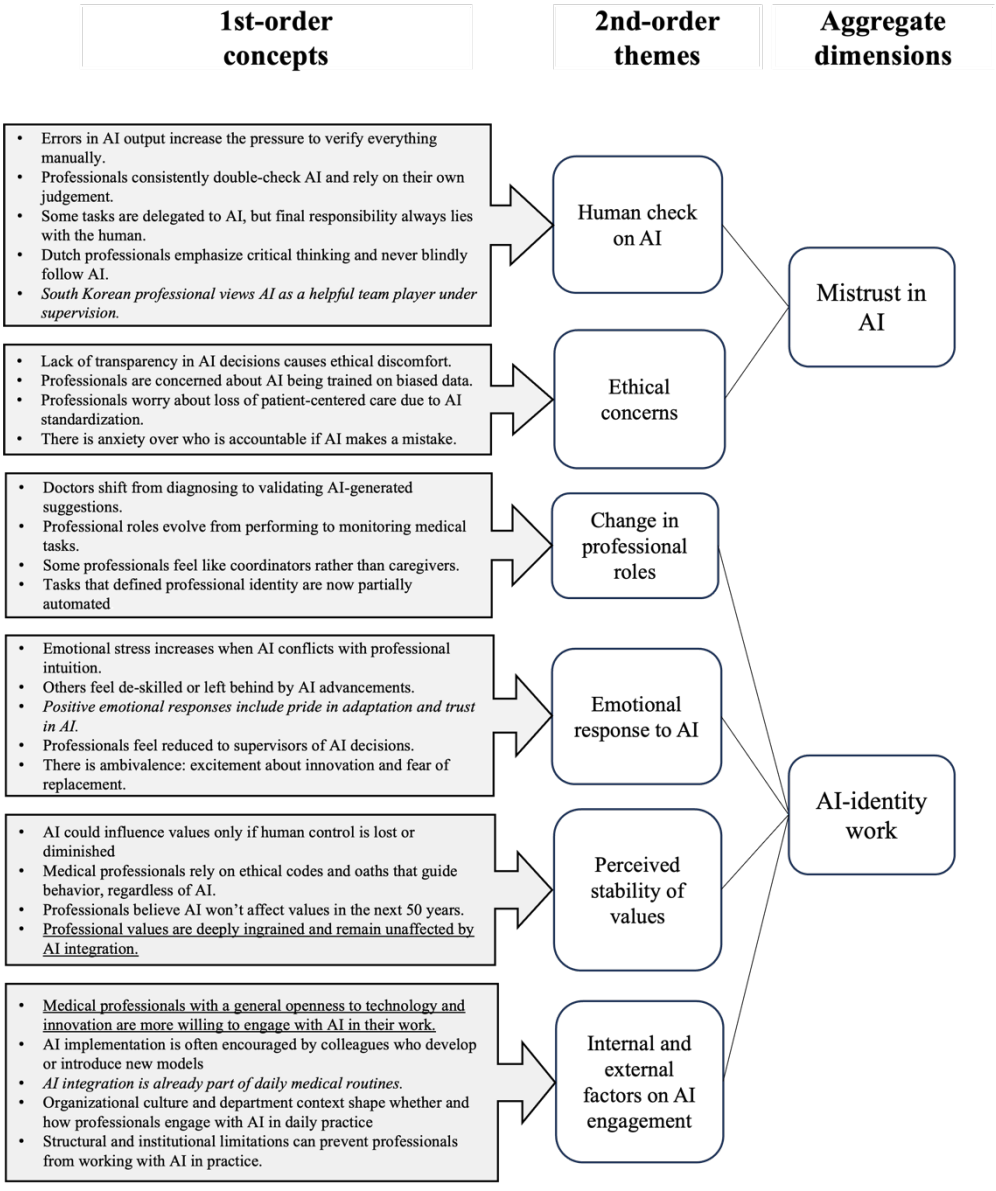

Figure 1 Data structure

Note: The South Korean participant highlighted the first-order concepts marked in *italics*, whereas the underlined first-order concepts were highlighted by both Dutch participants and the South Korean participant.

4.1. Mistrust in AI

The dimension reflects the widespread sense of caution among medical professionals regarding the integration of AI into their practice. It encompasses both the practical insistence on human oversight and the more profound concerns about ethics and values. Although AI is often welcomed as a helpful tool, participants voiced significant concerns about the transparency, reliability, and ethical implications of relying on AI in healthcare settings.

4.1.1. Human Check on AI

Throughout the interviews, a central theme that emerged was the persistent need for human supervision while working with AI systems. Participants consistently emphasised that AI should never replace human judgment, while they generally acknowledged the usefulness of AI in streamlining workflows and assisting in clinical decision-making. For instance, some doctors noted:

> *"I think that when you are talking more about, let's say, big data, it can inform us in a different way. For example, in terms of risk assessment for a particular patient. You know, currently we also use certain formulas to estimate the risk before a surgery. So, it can support decision-making." (NL07)*

> *"I think it is going to be an important form of support. It will help with determining the patient's prognosis, but also with diagnostic support, even treatment support. So that it will start suggesting treatments, or even directly guide treatments." (NL011)*

Medical professionals described themselves as the final checkpoint in any AI-supported process, rather than delegating responsibility to the machine or computer. This perspective reflects a broader mistrust of full automation, particularly in high-stakes settings such as healthcare, where mistakes could have serious consequences.

> *"But there are often more obstacles than you would expect. Maybe that is also because of the medical sector, I think. Because if you make a small mistake and someone dies, just to put it bluntly, that is very different from making a mistake and losing a hundred thousand euros in your business." (NL03)*

Even when AI systems are perceived as accurate or efficient, professionals explained that double-checking the output remains essential.

> *"Most AI-based systems are not advanced enough to be used stand-alone. You cannot just say, 'Here is the patient file, tell me the diagnosis.' … But what is especially important is that the healthcare professional has the final say. … For the time being, given the risk of hallucinations and other errors and other errors, I believe a human must stay in the loop." (NL12)*

> *"So yes, in that sense AI can definitely provide support, but there are certain things you simply cannot fully hand over. That just does not work." (NL07)*

Many doctors explained that AI should never act as an autonomous decision-maker, but rather as a supportive assistant or colleague. Its suggestions should always be interpreted through the lens of clinical experience. A few Dutch medical professionals captured this balance well:

> *"I think AI will function like a kind of co-reader alongside the doctor, making the outcomes more robust. Diagnosis becomes a sort of double-check system. For instance, when administering a specific medication, you normally have a second person to verify it. In this case, AI could take on that role." (NL05)*

> *"Of course, you still need to check for yourself, does the sentence I have put in there actually make sense? And ChatGPT does not always do exactly what you ask. … So, you always have to keep thinking for yourself." (NL010)*

> *"So, AI can be very helpful. But every now and then, you still have to think for yourself about what it is actually doing." (NL010)*

Others were concerned that an over-reliance on AI could lead to a more data-driven, standardised approach at the expense of human judgment and relational care. However, this was often framed as a potential risk rather than a current reality.

> *"The influence of AI on the norms and values is negative when AI is used as a quick fix." (NL04)*

> *"If AI says with a treatment what you didn't do right, and they sit in your chair, then I think it becomes a bit trickier." (NL06)*

Furthermore, several participants mentioned that they felt additional pressure to manually verify every suggestion when AI systems occasionally make inaccuracies or unexplained decisions. Instead of

making things easier, the use of AI can sometimes increase cognitive workload, as professionals feel compelled to double-check not only their thinking but also the AI's output.

> *"I think I prefer doing it myself, understanding it myself. I really enjoy understanding things. So, if you just throw it into an AI model, you can see that it works, but it does not really lead to understanding." (NL011)*

> *"If you critically look at the work of people in healthcare, it is also quite easy to point out flaws. So, you should see it as a tool, one that occasionally makes mistakes. I find it acceptable, as long as there is someone at the end of the chain who says, 'Okay, this is an error, ignore it, and the rest is fine.'" (NL012)*

> *"But that is how AI works. It just gets to work and finds a connection, and then as a human you go, 'Well of course that makes sense, because the radiologist put that mark there.'. So, the value of what an AI model produces, ultimately, you will always have to assess that yourself." (NL012)*

> *"Sometimes something is introduced that takes more time than the benefit you get in return. Because the protocol states it is better for one thing or another, but it ends up costing a lot more time, which then leads to resistance." (NL01)*

Even in contexts where AI performance is strong, professional responsibility remains a key concern. Participants made it clear that if something went wrong, they would be held accountable, not the AI. This legal and moral consideration further reinforces the necessity of human verification.

Interestingly, the professionals from South Korea and the Netherlands agreed on the importance of retaining final control. However, subtle cultural differences emerged. The Dutch professionals emphasised critical thinking and independence, often underlining that they would never blindly follow a system. The South Korean professional, while similarly cautious, described AI more readily as a team player that could provide efficient support in busy hospital environments, but always under supervision.

Although the tone varied, the underlying stance remained consistent: AI is welcome, but only if humans remain in charge. Participants consistently defined boundaries around the role of the machine, framing it as a tool that supports clinical reasoning rather than replacing it. This protective attitude towards human judgement reveals a strong undertone of caution and reflects a deep-rooted professional norm: to care is to decide, and deciding must remain a human endeavour.

4.1.2. Ethical Concerns

In addition to the practical concerns about AI reliability and governance, many participants expressed more profound ethical concerns regarding integrating AI into clinical practice. These concerns were not solely about performance or workflow disruptions, but rather about how AI can threaten or conflict with the moral fabric of healthcare.

One central theme was the problem of bias in AI systems. Professionals were well aware that AI depends on enormous datasets, some of which may be skewed, incomplete, or non-representative of diverse populations. This raised concerns that AI might unintentionally reproduce societal inequalities or fail to treat specific patient groups appropriately. Several participants expressed concerns that training data may underrepresent women, minorities, or vulnerable populations, leading to less accurate or fair outcomes.

> *"These systems are trained on scientific literature, which often lacks proper representation of certain groups. Populations in China, India, or the southern United States have different lifestyles and habits. While a cat in New Zealand and Venezuela may look the same, in terms of health and medicine, there can be significant differences. So, the question is: will an AI system work for, say, an indigenous group in the Amazon?" (NL02)*

> *"So, and of course, this is well known, in large systems, people who are minorities in a given society, and women, usually come off worse." (NL02)*

> *"Yesterday I was watching television and a cardiologist, a colleague, was talking about how medicine is still largely described from a male perspective. That men still dominate the field as specialists, and so on. And seriously, half of the world's population is female." (NL09)*

Another recurring issue was the lack of explainability and transparency in AI decision-making. Many participants described feeling uneasy when confronted with recommendations that lacked clear reasoning or justification. In contrast to human professionals, who can explain their thought processes, AI often functions as a 'black box', leaving users unsure of how a conclusion was reached.

> *"The risk is that healthcare always needs a human element to check whether what the computer comes up with actually makes sense. Sometimes there is this kind of black box producing an outcome. And if, as a doctor or a patient, you do not understand why it is giving that answer, it becomes difficult to explain why you*

> *are doing something or not. So that is really something we need to think carefully about." (NL010)*

This lack of clarity raised not only practical problems, but also ethical ones. Participants expressed concern that they would be asked to trust or implement decisions that they did not fully understand, let alone justify to patients or colleagues. This tension causes increased discomfort in high-stakes environments, such as the healthcare sector.

Linked to these issues was a widespread concern about accountability. The question of who bears responsibility when something goes wrong arose repeatedly. Although AI may assist with decision-making, professionals bear the legal or moral obligation. Concerns regarding shared or unclear responsibility were raised by this disparity, particularly in cases of error.

> *"The same goes for digital pathology, with traces and that kind of stuff. Because if there is a mistake in there, how are you supposed to deal with that?" (NL03)*

> *"You might think an individual healthcare provider knows less than a large AI system, but what if they choose to go against its advice? That is fascinating. Just look at self-driving cars making decisions and causing accidents. Developments are moving much faster than laws or risk management can keep up with." (NL02)*

A potential degradation of patient-centred care was a related ethical concern. Several professionals were concerned that AI systems, particularly when applied widely, might encourage standardised treatment that overlooks the individual needs, preferences, and values of patients. Despite their potential to optimise for efficiency, algorithms do not inherently account for the relational and emotional aspects of healthcare, which are fundamental to medical ethics.

> *"In practice, people sometimes fear that AI might take away the more enjoyable parts of the job. In theory, you could automate everything, but you would be delivering a different kind of care, and I think you would lose a lot in terms of quality. Most people still want to see a real person, you get much more out of a consultation that way. If care becomes just testing without human interaction, you will miss things like sexual violence, unplanned pregnancies, or human trafficking. That would be a step backwards." (NL010)*

Nevertheless, participants did not wholly reject AI, despite these concerns. Instead, they emphasised that well-defined principles should govern AI and that it must be embedded within strong ethical safeguards. Many referenced professional codes of conduct and the Hippocratic Oath as moral pillars that must not be compromised.

> *"Well, as doctors we have an ethical code. We once took an oath and there are a few things, I do not remember them by heart, but one of them is that you must always act to the best of your knowledge and conscience. Most importantly, the patient must always come first. First, do no harm. In fact, it also says that you must act responsibly towards society as well. And I think those are values and principles that guide how you should act in my profession." (NL03)*

> *"So, I think there needs to be some kind of new ethical guidelines for that." (NL09)*

> *"There must be strict laws and regulations." (NL014)*

Notably, ethical concerns were voiced by participants in both countries, though with slightly different emphases. Whereas the South Korean professionals referred more frequently to a collective ethical framework and medical codes, the Dutch professionals were more likely to emphasise individual moral responsibility and transparency. But in both cases, the message was clear: AI cannot take the place of ethical judgment, personal accountability, or the core values of the profession.

This subtheme shows that ethical mistrust of AI is rooted in a protective attitude toward the moral legitimacy and relational essence of medical practice, which goes deeper than scepticism regarding performance.

4.2. AI-identity Work

The second aggregate dimension reflects how medical professionals experience the impact of AI on their professional roles, emotions, and core values. Participants reflected on how AI influences their daily tasks, their emotional connection to their work and the moral standards that guide their practice, rather than seeing it as solely a tool.

4.2.1. Change in Professional Roles

Numerous participants described how their professional roles were gradually reshaped as a result of the integration of AI. Rather than removing the need for human professionals, AI was perceived as shifting the nature of their work, often from performing clinical tasks to overseeing, validating, or interpreting AI-generated output. Several professionals pointed out that AI changes their involvement in the diagnostic process. AI is currently often used to initiate tasks like analysing scans or suggesting treatments, with humans intervening to critically assess and approve the recommendation.

> *"It definitely will. I see it in a positive way when it is used to enhance diagnosis or to monitor patients…" (BC01)*

> *"If it's truly supportive, then it's great. Or if it can take over boring tasks that no one's waiting to do, and do them reliably, then that's a good thing. The risk is that healthcare requires a human element, to check whether what the computer comes up with actually makes sense." (NL010)*

Although this shift was occasionally welcomed as a way to save time or reduce cognitive load, it also raised questions about professional identity. Rather than being hands-on practitioners, some professionals described feeling more like coordinators or supervisors:

> *"The only thing is, where do you draw the line between what you leave to a computer and what you still want to check yourself? To me, it would feel less safe if it were a self-thinking or self-learning computer. I would struggle with that a bit more. But I do think that is the direction we are heading in." (NL06)*

> *"AI, friend or foe? So, is it something you should embrace, or something to wary of? I think as long as you can still take on some kind of controlling role yourself, then it is a good thing. It is a very useful addition." (NL06)*

A few participants emphasized that clinical responsibility still defines their role, even though AI can replace routine steps:

> *"Some things will always stay the same. What I said about patient care and how you should treat patients, that responsibility, I think will remain unchanged." (NL03)*

> *"Of course, in healthcare, the doctor always carries the responsibility. I think AI will always play a supporting role. A program cannot take responsibility, so it will always remain supportive. But it can still be very helpful." (NL08)*

Although participants in both countries described similar role shifts, the Dutch professionals more often emphasised concerns about autonomy and decision-making, whereas the South Korean participant explained AI as a integrated and normalised component of his clinical practice:

> *"AI has already been integrated into my daily practice as an interventional neuroradiologist" (SK01)*

> *"When I decide whether to recanalise (open up) an occluded brain vessel, I rely on AI software-generated information regarding salvageable brain volume …" (SK01)*

In general, AI was seen as redefining professionals' roles in the care process, rather than as a replacement for them. These role shifts prompted participants to consider how their tasks are changing as well as how they perceive themselves within their profession, and how that perception might continue to evolve.

4.2.2. Emotional Response to AI

In addition to practical and professional adjustments, participants also expressed a range of emotional responses to working with AI. These included ambivalence, pride, uncertainty, and in some cases even a growing sense of detachment from core tasks.

Fear of replacement was a recurring theme, especially in the data-driven specialities. Multiple participants expressed similar concerns that they expected some colleagues to experience fear of losing their jobs. For instance, some participants noted:

> *"But that sometimes also has to do with fear of new things, I think. Or maybe even a literal fear of losing your job. For example, if you are a pathologist or a radiologist, professions where people say AI is going to play a much bigger role." (NL03)*

A more general comment reflects this observation:

> *"In general, technologies are introduced within healthcare. But staff tend to be quite hesitant. They find all these changes a bit daunting, it often takes extra energy. It is easier to join a location where everything has already been implemented than to be the one introducing it. So, you do notice a certain level of reluctance there." (NL01)*

In addition to this potential fear of replacement, some professionals expressed that they expected to feel emotionally stressed when AI would go against their clinical intuition. Not being able to fully trust the system or having to disregard one's own judgement, created discomfort and moral tension. As stated by one of the professionals, for example:

> *"I think it would be difficult if the system says go left, while you believe you should go right. That could put you in kind of a moral dilemma, depending on your personality, I think. And maybe also the legal consequences. You might end up thinking: should I follow the system, or stick with my own decision?" (NL02)*

This emotional strain was also evident in the early stages of implementation, when professionals were asked to trust unfamiliar systems. For some, letting go of control felt unsettling.

> *"I think there is still a lack of awareness about how to deal with it. You often quickly get people saying it will solve all our problems, or others saying it is extremely dangerous, the world is ending. But once you learn more about it, you naturally start to see the nuances. I think it is mainly that, when you do not really understand what something is, it can seem either really scary or overly positive." (NL08)*

Concerns on how others might use AI, including the risk of blind reliance on AI, were also raised by one of the professionals:

> *"Yes, I do think so. What I am a bit concerned about is that, well, everyone just wants to get their tasks done quickly. … People take risks because they want to achieve certain goals." (NL09)*

However, not all emotions were negative. Multiple professionals expressed a state of ambivalence, caught between fear of obsolescence and an eagerness for innovation. One participant described this nicely:

> *"There is always a bit of suspicion, but it does not overtake us. That it does not become too much." (NL06)*

In more optimistic narratives, participants expressed a sense of satisfaction and trust in AI when it proved reliable.

> *"That all comes down to trust, you know. If you try it and see that it works well, then you will find it easier to hand things over. But yes, in the beginning, that will always be difficult." (NL06)*

Both the South Korean professional and the Dutch professionals shared this ambivalence, which is the balancing act between excitement about innovation and fear of replacement or loss of meaning. Although there were underlying concerns present in both contexts, the South Korean participant more often frame emotions in terms of progress and teamwork, whereas the Dutch participants tended to highlight personal doubt and shifting identity.

Overall, how professionals see their role in the healthcare system and cope with uncertainty in an evolving technological landscape are closely related to the emotional dimension of AI integration, influencing not just their job but also their perception of their role in the system.

4.2.3. Influence of AI on Values

Participants also reflected on how the core values that guide medical practice might be influenced by AI's expanding role. It is interesting to note that the majority of the professionals expressed a strong belief that these values, like empathy, responsibility, and integrity, are deeply rooted and unlikely to be changed by technology alone.

> *"I believe that the values and principles of a Dutch doctor are, to a large extent, embedded in our Constitution, but also in the principles you commit to when taking the physician's oath." (NL04)*

> *"Essentially, the Hippocratic oath is our norms and values, that you should not harm your patients, and treat them as best you can and that also means that sometimes you have to refrain from treating them." (NL012)*

A number of participants referred to the medical oath and professional training as sources of stability. They emphasized that ethical standards remain unchanged, regardless of technological advancements.

> *"Well, no, I do not think so. When it comes to values and principles, that is also just part of who you are. I do not think AI changes that. I really do not." (NL06)*

> *"In a way, I keep thinking of the Hippocratic Oath. I mean, it has been around for over 2,000 years and we still refer to it. So much has happened in all those years, and yet we still say the Hippocratic Oath is incredibly important. As a doctor, that is what you stand by. So, I do not believe AI will change that." (NL09)*

> *"I still have some doubts about whether the influence of AI on norms and values will get in the way of interpersonal contact." (NL011)*

This perspective was also strong for the South Korean professional, who referred to four strong core ethical pillars as fundamental to their profession.

> *"A core value of my profession is achieving excellent clinical outcomes for patients. Our profession is guided by four ethical principles: non-maleficence, beneficence, autonomy, and justice." (SK01)*

This confidence was shared by the Dutch professionals, who also emphasized the importance of actively safeguarding values, especially in light of increasing system reliance. Some participants did point out that AI might have an indirect influence on values, particularly if human oversight were to diminish.

> *"So, if you go for the quick fix, I think your values and principles as a doctor could be compromised. But if you use AI as a self-evaluation tool and you are willing to really engage with it, deeply enough to say, 'Hey, what AI is saying here, I fully agree with, and I will translate that back to my patient.', then I think it can actually support your values and norms framework." (NL04)*

> *"From the perspective of a doctor, if AI supports the doctor better, that can mean more attention for the patient, then the norms and values can be influenced that way." (NL05)*

> *"I think that the influence of AI on the norms and values is indirect, otherwise it would be as if some kind of computer world takes over the world and tells us what we find important. And that is obviously strange right? We are still far from that… it is just weird." (NL07)*

> *"If it is left unchecked, thing could start to shift. You already see it with social media and how with AI generating face news, it might very well have an influence on norms and values." (NL014)*

Although they recognized that their application and interpretation could evolve if AI systems were to become dominant, the professionals from both countries generally saw core values as stable. This awareness led many to reflect on the importance of maintaining human control, not only for accuracy and responsibility, but also to preserve the moral essence of care. These reflections show that the values are not static, but rather resilient, shaped in interaction with both tradition and technology.

4.2.4. Internal and External Factors on AI Engagement

Professionals' engagement with AI is not solely influenced by the technology's presence or capabilities. Participants discussed a variety of personal and contextual factors that influenced their engagement with AI in professional practice. On an individual level, a number of professionals mentioned that personality traits such as a general openness to technology and a scientific mindset increased confidence when interacting with AI. This openness often resulted from a deeper affinity with innovation and scientific development.

> *"I have always been very fond of sciences, and it seemed to be a good option to do both research and a practical thing." (BC01)*

> *"I am very curious by nature. New technology always appeals to me. I also see it as a solution to existing problems." (NL014)*

While some professionals expressed curiosity and a willingness to experiment, others emphasized that acceptance was not only influenced by the mindset, but also by a person's educational background or other broader social aspects. One Dutch participant shared some interesting thoughts on this:

> *"But if you have people from South Korea who all belong to the upper segment of society… As a doctor, you naturally come from a background that only a small percentage of people in the Netherlands have, educationally and economically. I think that plays a big role too." (NL02)*

> *"I think it really depends on the personality of the interviewee, how they view these kinds of things." (NL02)*

> *"In terms of education level …, and how you deal with new people and resources…. So, you do not really know how adverse or how adaptive people are to different things." (NL02)*

Additionally, many participants noted that their immediate environment, including colleagues and department culture, had a significant influence on their engagement with AI in addition to their personal dispositions. A number of professionals reported that their peers have introduced AI into their workflows by either developing models themselves or actively encouraging others to explore AI-driven tools.

> *"A colleague of mine developed a model to predict admissions at the ER, but I was not involved in that. And we are, or at least I know a colleague who is currently developing a prediction model for people with a hypotracture." (NL08)*

While most Dutch professionals considered AI as emerging or experimental within their departments, the South Korean participant revealed that AI was already a standard component of clinical work.

> *"AI has already been integrated into my daily practice as an interventional neuroradiologist." (SK01)*

This demonstrates how different professional environments can have varying degrees of AI integration with some, like the South Korean case, already integrating it into daily routines.

The impact of structural, external factors, however, appeared to be even more significant. Despite extensive academic attention and growing public discourse, most professionals in the interviews noted that the actual use of AI in healthcare was still quite small.

> *"Well, one important thing to realize is that an incredible amount of research is being done on AI. The number of publications exploded, but practical implementation is still lagging behind." (NL012)*

> *"But it is talked about more than it is actually applied. There has been a huge surge in research, literature and promises of golden opportunities. But in daily practice, we do not see much of that yet." (NL02)*

These implementation gaps were frequently ascribed to the regulatory and institutional landscape, which was thought to be cautious, slow, and sometimes even obstructive. Strict legislative frameworks, funding issues, and bureaucracy were commonly mentioned as the main barriers to practical integration.

> *"There are even regulations for this. A lot of AI applications, like the one I mentioned in the OR, fall under medical device legislation… Nowadays, the rules are much stricter. You need certification, proof of safety, etc….. That takes time and money, and sometimes companies think: it is too expensive, too much effort, forget it." (NL03)*

> *"Yes, it Is taking longer than we expected. I think that is because of regulations and legislation, and our profession is, of course, quite conservative." (NL014)*

Some participants linked resistance to the human cost of change as well as to regulations. Time, effort, and coordination are necessary for the implementation of new systems, and these are resources that are frequently limited in healthcare environments.

> *"In general technologies are introduced within healthcare. But staff tend to be quite hesitant, they find those changes daunting. It often takes extra energy." (NL01)*

> *"I think healthcare is generally very conservative worldwide. New innovations often take a long time to reach the actual workplace. It is always easy to set up a pilot or small project, and that happens a lot. But getting something widely implemented and embraced takes time." (NL010)*

These reflections imply that both systemic support and individual readiness are necessary for a successful AI integration. Practical implementation is nevertheless reliant on organizational capabilities, legal frameworks, and workplace culture, even in cases where individuals are personally

receptive to technological innovation. Therefore, engaging with AI requires negotiating a complex ecosystem of enabling and restricting forces rather than just having the right mindset.

5. Discussion

This discussion reflects on the findings of this study, which aimed to explore how AI affects the professional identity across cultures, focusing on medical professionals in the Netherlands and South Korea. More specifically, it explores how professional identity is influenced by AI, especially within high-stakes environments like healthcare. Although this thesis is not fully a comparative case study due to the limited South Korean sample, this research also uses a cross-cultural lens to explore how AI affects professional identity in various cultural contexts. It offers two main contributions.

First, it reveals how medical professionals engage in subtle, ongoing identity work to realign their professional roles, rather than viewing AI as an existential threat to their identity. Both internal beliefs and external factors influence this identity work. The findings add nuance to the existing literature, that frequently portrays AI as either a threat of replacement or an opportunity for enhancement. Rather, this study shows how AI can act as both as a threat and an opportunity at the same time, causing identity adaptation and emotional tension.

Second, while the ultimate identity outcomes (i.e., role redefinition) may be similar across cultural contexts, this study provides some evidence that the underlying processes, motivations, and framing mechanisms of Eastern (South Korean) and Western (Dutch) professionals may differ. Although this study does not constitute a comparative case study in the strict sense, due to the small South Korean sample, it does offer interesting cultural nuances which should be interpreted with caution. Understanding the dynamics of AI-identification is made more difficult by the impact of cultural norms on how AI is accepted, questioned, or integrated into one's professional identity.

In the following sections, the theoretical contributions through the lens of identity work literature are analysed, practical implications advanced, and limitations and opportunities for future research discussed.

5.1. Theoretical Implications

The conceptual model below (see Figure 2) illustrates how professionals respond to AI integration by experiencing role disruption rather than identity threat, which leads to different types of identity work. From our results it is clear that, whereas core professional values often remain stable, changes in task responsibility seem to challenge professionals to renegotiate their roles. This process is shaped by a combination of internal factors (such as openness to innovation), external factors (such as organizational context), and social validation (the perceived legitimacy of new roles by peers, patients, and leaders). As a result, the identity outcomes that follow, whether reframing, resistance, or adaptation, are socially and culturally embedded rather than purely personal responses. This model

forms the basis for the theoretical interpretation covered in the following sections. A larger version of the figure can be found in Appendix B.

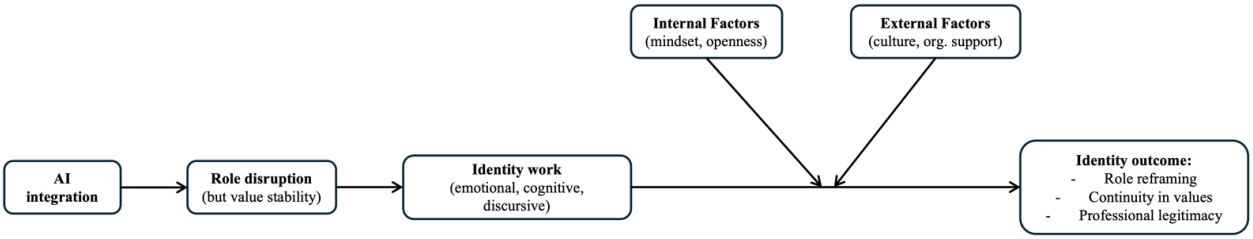

Figure 2 Visualization of findings

5.1.1. Reframing AI's Impact: From Threat to Tool in Identity Work

One important finding from this study is that AI is perceived more as an incentive for role-based adjustments rather than a threat to core professional identity. This is a crucial distinction. The findings challenge the view that AI compromises fundamental values or professional legitimacy, which is frequently highlighted in the literature on identity threat (e.g., Petriglieri, 2011; Jussupow et al., 2022). Instead, even while some aspects of their everyday work were being automated, the professionals in this study maintained a strong belief in their ethical frameworks, patient-centeredness, and human judgment.

This is consistent with the functional-identity framework proposed by Selenko et al. (2022), which suggests that the impact of AI on identity is more dependent on how AI reshapes functional roles and how those roles support identity-related needs like social recognition and meaning-making, rather than whether AI is actually used in the workplace. It also aligns with Scheek et al. (2021), who demonstrated how radiologists actively assumed new roles with the development of AI, such as coordinators and validators, highlighting their ongoing agency and involvement in shaping how AI fits within clinical practice. In this study, professionals underlined the necessity of human supervision and ethical evaluation, emphasizing their continued responsibility for ultimate decision-making, even when assisted by AI tools. Instead of giving up authority, they presented themselves as the final gatekeepers, integrating AI insights into more comprehensive clinical reasoning. Although they were sometimes emotionally charged, these new roles were seen as different instead of inferior. This study contributes to previous research by showing that professionals' identities are actively integrated into this role shift through meaning-making narratives, rather than being just structural or imposed by technology. Professionals reinterpret new roles in a way that reinforces their professional agency rather than passively accepting them.

Crucially, this thesis demonstrates how professionals actively participated in identity work to include AI into their self-concept, frequently using narratives that emphasize responsibility, oversight, and

critical thinking (Caza et al., 2018; Winkler, 2018). Although earlier research has shown that professional identity can evolve in response to contextual change (Caza & Creary, 2016), the findings of this study indicate that this does not necessarily imply a transformation of core identity values. Instead of adapting their identity to fit AI, professionals perceived AI in ways that reinforced and confirmed their existing values and roles. Thus, this study adds to the body of literature by demonstrating how professionals adapt their functional roles and responsibilities while preserving their core identity in the context of technological change. In order to preserve professional integrity in the face of AI integration, these adjustments involve relational, emotional, and cognitive efforts.

Another contribution lies in the dual role of internal and external factors on how professionals adapt their identities. Internally, echoing research on how identity conflict can stimulate personal growth (Carminati & Héliot, 2022), the results also showed that professionals with a learning-oriented mindset or a strong affinity for innovation were more likely to see AI as an opportunity (Gecas, 1982; Selenko et al., 2022). Externally, engagement with AI was significantly impacted by the organizational context, which included departmental culture, available training, and the presence of tech-savvy colleagues (Perez et al., 2024. Faraj et al., 2018). Previous research has already shown the importance of contextual factors in influencing identity dynamics (Carminati & Héliot, 2023), and the socio-constructivist view emphasizes that relational dynamics and broader organizational discourses are ingrained in identity work (Caza et al., 2018; Stryker & Burke, 2000). This research extends these insights by showing how this interplay happens cognitively, relationally and emotionally.

Indeed, interestingly, the findings also imply that emotional reactions to AI, such as pride, ambivalence, worry, and de-skilling, were fundamental to making sense of identity processes and were not exclusively negative (Winkler, 2018; Selenko et al. 2022). Although some professionals expressed discomfort about losing hands-on tasks, others took pride in their ability to adapt or even felt relieved when routine decisions were delegated. These findings resonate with work on emotions and identity work, which highlights that identity work is not only triggered by identity threat but also has a deeply emotional process and outcome (Carminati & Héliot, 2022; Caza et al., 2018; Winkler's, 2018). As Winkler (2018) argues, emotions are not only a part of identity work, rather they are a component of it, influencing its impact and direction. Emotions thus serve as both a motivator and a product of identity realignment.

Finally, this study contributes to the understanding of identity work strategies in response to AI. These include cognitive reframing ("A program cannot take responsibility, so it will always remain supportive."), behavioural strategies (consistently verifying AI output), and discursive tactics ("The healthcare professional has the final say.") (Caza et al., 2018). Such tactics demonstrate how

professionals use various resources to maintain reconstruct a coherent sense of self, including reflective reasoning, language and discourse, embodied routines, and emotional regulation. This fits with what Caza et al. (2018) describe as mode-specific identity work, which includes cognitive (such as reframing the purpose of their work), discursive (such as verbal affirmation of continued authority), behavioural (such as adapting practices to incorporate AI oversight), and physical strategies (such as adjusting the interaction of digital tools in clinical routines). According to the findings of this research, these modes of identity work frequently intersect in practice. Reflective sense-making was often linked with behavioural strategies such as verifying AI outputs and discursive affirmations such as stating their continuing responsibility. Together, these efforts enabled them to re-establish their professional identities in the amidst of chancing expectations. By demonstrating how professionals seamlessly combine these modes in their day-to-day interactions with AI, this thesis expands on these insights. And this demonstrates not only what strategies they use, in addition it shows how identity coherence is maintained over brief periods of ambiguity.

These findings, along with their theoretical grounding, lead to the following propositions for future research:

Proposition 1: *When professionals maintain a strong sense of professional autonomy and responsibility, they are more likely to interpret AI as an opportunity rather than a threat.*

Proposition 2: *During technological change, professionals can preserve identity coherence by using cognitive, behavioural, and discursive identity work strategies.*

5.1.2. Reflecting on Cultural Differences in Identity Framing

Despite the small number of South Korean participants, one of the most surprising findings of this study is that, even with their vastly distinct cultural logics, the Dutch professionals and South Korean professional had similar identity outcomes. Both acknowledge the need for a “human check”, both experienced role evolution, and both maintained their ethical frameworks.

The difference lies more in how these outcomes were reached. Professional autonomy, cautious resistance, and critical evaluation were common ways that Dutch professionals framed AI. They criticised a blind reliance on AI systems and stressed their role as decision-makers. This is consistent with egalitarianism and self-determination, two Dutch cultural values (Hofstede, 2011; Enklaar, 2007). In the Dutch context, professionals primarily defined AI as something that impacts their sense of control and responsibility, rather than just as a practical tool. Expressions like “of course, you still need to check for yourself”, “I believe a human must stay in the loop”, and “you will always have to assess that yourself” reveal a deeper concern about losing control and professional responsibility in the face of AI. When evolving roles do not align with internalised professional values, identity stability may be

challenged, as seen by the discomfort experienced by the Dutch professionals in our results (Selenko et al., 2022). Conversely, the South Korean participant expressed a remarkably positive and practical perspective toward AI. AI was portrayed as something that “is already there”, “ubiquitous in the medical field”, and beneficial for improving quality and reducing human error rather than as a threat. These remarks imply that in contexts where technological integration is already normalized and not seen as a threat to core professional values, role changes might be more easily accepted. The South Korean participant showed no signs of discomfort with AI implementation, in contrast to the Dutch professionals who expressed concerns about maintaining control and responsibility. This case suggests that identity work in response to AI is impacted by systemic and cultural expectations around innovation and trust in technology in addition to their internal values (Creed et al., 2010; Kostera, 2007). Despite being based on a single South Korean participant, this contrast emphasizes the need for further research into how cultural environments shape the legitimacy of new professional behaviours in the face of AI.

Although this study is unable to make strong claims regarding national differences, these observations do indicate that identity work is not culturally neutral. This is reflected in how Dutch professionals stressed the importance of autonomy, caution, and control, often expressing concerns about losing oversight due to AI. The South Korean participant, on the other hand, said AI was already integrated and beneficial, and did not see it as a threat to core values. Rather, culture affects how professionals understand technological change, which identity threats are most salient, and which responses are emotionally or legitimately acceptable (Creed et al., 2010; Ibarra & Barbulescu, 2010). For instance, the South Korean participant embraced AI as a helpful tool in medical work, while the Dutch professionals presented it as a potential risk to individual decision-making. These cultural framings influenced how identity tensions were experienced and managed.

This supports previous research showing that identity narratives are culturally embedded and validated (Brown, 2014; McAdams, 1996; Ibarra & Barbulescu, 2010). By showing how cultural norms influence not only the emotional tone of identity narratives but also which identity strategies are seen as legitimate and resonant within a given cultural context, this study contributes to these perspectives. While the Dutch participants in this study were more likely to see AI as a challenge to their independence, the South Korean participant framed AI as a valuable team player that improves performance and supports professional goals. This suggests that while AI might provoke similar identity work on a global scale, national culture significantly impacts the coping mechanisms, emotional responses, and interpretive frameworks used to enact this work.

This cultural insight is theoretically relevant because it demonstrates how different cultural values and norms can influence the framing, acceptance, and emotional processing of identity change, even in cases where change is externally imposed, such as through automation. Therefore, cultural scripts should be taken into account in future identity research as active agents that shape how identity is performed, narrated, and preserved (Gherardi & Nicolini, 2006; Ybema et al., 2009), in addition to being contextual variables.

The following propositions for future research are derived from these findings and their theoretical foundation:

Proposition 3: *Professionals' emotional interpretations and framing of the impact of AI on their professional identity are shaped by cultural values.*

Proposition 4: *Identity work in response to AI is more likely to emphasise autonomy and critical evaluation in cultures with high levels of individualism.*

5.2. Practical Implications

The findings of this study have several practical implications for healthcare organisations, hospital managers, and policymakers involved in integrating AI in clinical settings. Although many implementation strategies focus on technological adoption, this study makes a significant contribution by highlighting the identity-related consequences of AI adoption in high-stakes professional environments, such as healthcare.

At the individual level, professionals could benefit from personal support systems that address identity work in addition to technical training. Professionals actively participate in reflective processes to reframe their roles in relation to AI, as demonstrated by this study. Supporting this identity work could help reduce emotional conflict and uncertainty. Workshops, peer discussions, or "liminal space" could help professionals explore and understand their evolving roles (Selenko et al., 2022). Such spaces can promote psychological safety and identity reconstruction, especially for doctors who feel conflicted between their traditional professional values and the new responsibilities AI brings (Selenko et al., 2022). By demonstrating that such support is not only helpful but also essential for professionals to maintain identity continuity during times of technological disruption, this study contributes to the existing body of research.

At the managerial level, leaders must understand that the use of AI has a significant impact on how professionals perceive their roles and legitimacy. As a result, it is both a symbolic and an operational change. This study found that professionals were more likely to interact with AI in a positive manner when they felt that their judgment and ethical responsibilities remained integral to their role. To help

professionals feel acknowledged in their evolving roles, managers should take a relational leadership approach that emphasises recognition, meaning-making and collaborative role framing (Cunliffe & Eriksen, 2011; Selenko et al., 2022). For example, new tasks such as critically evaluating AI output should be explicitly recognised as expert behaviour, rather than routine checking or downgraded work. This reframing of roles could promote identity enhancement and lessen the likelihood of identity conflict. Accordingly, this study also shows that professionals are more inclined to engage with AI constructively and openly when they feel that their judgment and values remain essential to their work. Therefore, communication strategies should emphasise that human oversight remains crucial, and that AI is a tool for collaboration rather than a replacement.

From a policy perspective, AI integration programs in healthcare should consider clinicians' professional self-concept, in addition to infrastructure and skills training. This study found that professionals are more receptive to AI when they do not perceive it as compromising their professional legitimacy or ethical agency. Therefore, measures to identify and address identity-related risks, such as resistance or disengagement due to a perceived loss of role value, should be part of implementation roadmaps. Additionally, regulatory bodies and professional associations should consider updating professional standards to reflect the legitimacy of AI-related tasks as integral components of medical identity. By ensuring that identity transitions are acknowledged and socially validated, this institutional reframing may lessen emotional resistance.

From a policy perspective, AI integration programs in healthcare should consider the professional self-concept of doctors, in addition to infrastructure and training. Implementing roadmaps that address identity-related risks can help prevent disengagement or resistance later on. Furthermore, upgrading professional standards to include AI-related tasks as legitimate and valued aspects of medical identity may be the responsibility of regulatory bodies and professional associations.

To put it briefly, managing the introduction of AI requires more than just technical onboarding. It requires identity-sensitive change management that helps professionals reflect, adapt, and maintain meaningful connections to their evolving roles in a rapidly changing landscape.

5.3. Limitations & Future Research

As with any qualitative study, this research contains some limitations that should be acknowledged and addressed in future research. First, the most prominent limitation lies in the unbalanced sample composition, particularly the inclusion of only one South Korean participant. Although the study cannot be a strictly comparative case study due to its limited cross-cultural representativeness, the high quality of the sample, which comprises very busy and prototypical medical professionals (Pratt et al., 2006), supports the depth and rigour of the insights obtained. Nevertheless, claims regarding cross-

cultural differences must, therefore, be interpreted with caution. In order to enable meaningful comparison and theoretical saturation in each case, future research should strive to include a more diverse and balanced sample across cultural contexts, ideally with multiple participants from each country.

Second, although conducted under supervision and following a systematic coding procedure, the study was carried out with only one coder (the researcher). As in all qualitative work, the subjectivity inherent in qualitative interpretation remains, even with the Gioia methodology's transparency through data structure and verbatim coding. Multiple coders and intercoder reliability checks could be helpful in future studies to enhance the credibility of the findings. Additionally, collaborative coding may enhance conceptual depth by introducing new perspectives to the material.

Third, although this study focused on medical professionals, the findings may not be applicable to other high- or low-status professions or non-healthcare settings. Future research may expand this line of inquiry to various professional fields, such as law, engineering, and education, to investigate whether comparable identity dynamics emerge in response to the implementation of AI.

Fourth, the study offers a glimpse into a quickly evolving phenomenon. As AI tools develop and their integration becomes more normalised, professionals' perspectives and identity work may also change. Longitudinal studies, which follow participants over time, can monitor how identity responses evolve and whether initial resistance transforms into acceptance or reframing.

Fifth, another critical limitation concerns the potential self-selection bias in the sample. As one participant wisely pointed out, professionals who feel sceptical, anxious, or even resistant toward AI may be less likely to volunteer for a study on this topic. This may have led to a sample skewed toward professionals who were more open or curious, which in turn could have underrepresented perspectives that were more critical or oppositional. To ensure a broader and more balanced range of identity responses, future research could actively seek to recruit voices that are reluctant or resistant, for instance by collaborating with professional associations or using anonymous survey methods.

Sixth, this study used two different research instruments: semi-structured interviews for the Dutch participants and written open-ended responses for the South Korean participants. Although this approach was necessary due to language barriers and practical constraints, it had limitations in terms of comparability and consistency. While interviews provide more opportunities for clarification and probing, written responses may not possess the richness, spontaneity, and nuance of spoken dialogue. As a result, differences in findings may partly reflect methodological variance rather than solely cultural or experiential differences. Future research should strive to employ more consistent methods across

cases, such as multilingual researchers or translated interviews, to ensure methodological alignment and improve data comparability.

Lastly, this study focused on narrow AI, which enables specific medical tasks. Future studies may examine the effects of more autonomous or general AI systems on professional identity, particularly when they become more deeply involved in diagnosis, ethical judgment, or decision-making.

In conclusion, although this study offers valuable insights into the relationship between AI and professional identity, further research is needed to expand, deepen, and validate these findings across diverse periods, professions, and cultural contexts.

6. Conclusion

This study has shown that even in the face of rapid technological change, such as the integration of AI into healthcare, professionals continue to shape and protect their sense of identity. Instead of seeing AI only as a threat, many medical professionals reframed it as an opportunity, demonstrating their ability to reevaluate their roles, values, and expertise. Ultimately, they were able to adopt new forms of responsibility while retaining what matters most to them. Although the road to adaptation is not without emotional and professional tensions, this research emphasises the decisive role of identity work as a stabilising and meaning-making force during times of disturbance. And so, *who am I with AI?* I am not replaced but redefined. Still a professional, and still human, but in a different role, working with AI rather than against it.

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8. Appendix A1: Interview Dutch Medical Professionals

Interview Guide: Dutch Medical Professionals

The interviews will only be conducted once the participant has been provided with the information sheet and has signed the consent form.

Thank you so much for participating in my study. I really appreciate it. I also would like to underline that there is no right or wrong answer here, I am just interested in your opinion and perspective on this.

Themes	Main questions	Probing questions
Introductory questions	Why did you decide to become a doctor?	What are your main responsibilities?
	How long have you been working in this field?	
	Has your job changed over the last years?	How?
Artificial Intelligence	Are you familiar with the concept of AI?	And what about its applications in the medical field?
	How do you think AI technologies are impacting your profession?	
	Can you describe any experiences you've had with AI in your professional practice?	Did you perceive this as positive or negative?
	Do you believe AI will have an influence on your profession in the future?	How? Do you see this as a positive or negative thing?
	To what extent do you think AI use differ in The Netherlands compared to South Korea?	
Professional Identity	What are the values and norms of your job?	Do those give you meaning and purpose as well?
	To what extent do you believe that AI has the potential to change these values of your work in the future?	Do you believe this is a good or bad thing?
Closing	Is there anything you would like to add?	

Thank you for your time and effort. As mentioned, the date will be kept confidential and will be used exclusively for my Master's thesis. In case of any follow-up questions, I will provide you with my contact details.

9. Appendix A2: Open-ended written interviews with South Korean Medical Professionals

Open-ended written interview: South Korea Medical Professionals

The interviews will only be conducted once the participant has been provided with the information sheet and has signed the consent form.

Thank you so much for participating in my study, I really appreciate it. I also would like to underline that there is no right or wrong answer here, I am just interested in your opinion and perspective on this. Below you can find the question I would like to answer. Feel free to be as elaborate as you like, there is no maximum of words for any of the questions.

Question 1: **Why did you decide to become a doctor?**

Question 2: **Has your role evolved over the last years? How?**

Question 3: **Are you familiar with the concept of AI? And what about its applications in the medical field?**

Question 4: **How do you think AI technologies are impacting your profession?**

Question 5: **Can you describe any experiences you have had with AI in your professional practice? Did you perceive this as positive or negative?**

Question 6: **How do you think AI will influence your job in the future? Do you see this as a positive or negative thing?**

Question 7: **To what extent do you think AI use differ in South Korea compared to The Netherlands?**

Question 8: **What are the values and norms of your job?**

Question 9: **To what extent do you believe that AI has the potential to change these values of your work in the future? Do you believe this is a good or bad thing?**

Question 10: **Is there anything you would like to add?**

Thank you for your time and effort. As mentioned, the date will be kept confidential and will be used exclusively for my Master's thesis. In case of any follow-up questions, I will provide you with my contact details.

10. Appendix B: Visualization of Findings