



How health promotion prevents itself from tackling health inequalities. A critical analysis of Dutch health promotion's paradigm through its handbooks (1995–2022)

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ARTICLE INFO

Keywords:

Health inequalities
Health promotion education
STS
Critical curriculum analysis
Paradigm

ABSTRACT

Health inequalities are a central concern within the field of health promotion. Yet, for over four decades, research has consistently shown that socioeconomic health inequalities in Western Europe persist and, on some measures, even have widened. Explanations are typically sought in the behaviours or personal characteristics of 'unhealthy populations' or in neoliberal policies. However, the role that health promotion itself, through its central theories, methods and assumptions, plays in the persistence of health inequalities is rarely considered. This study addresses this gap: it explores how health promotion's paradigm informs professionals to reduce health inequalities. Since paradigms are conveyed through handbooks, we conducted a qualitative content analysis of multiple editions of three key handbooks used in Dutch graduate health promotion education, published between 1995 and 2022. Using Science and Technology Studies's notion 'paradigm' and the theoretical lens of formal, hidden, and null curricula from Critical Education Studies, we show that Dutch health promotion professionals have been socialised into a remarkably consistent paradigm for three decades. This paradigm, which draws heavily from socio-cognitive psychological models, teaches professionals to prioritise individual behaviour change and not to challenge sociopolitical actors whose actions contribute to ill-health. Justifications remain limited to considerations such as convenience, ease and cost-effectiveness. The handbooks that convey this paradigm continue to be used in Dutch graduate education, training the health promotion professionals of the future. We argue that, at least in the Netherlands, the prevailing paradigm of health promotion is a significant, yet overlooked, factor in the persistence of health inequalities.

1. Background

Statistics analyses show significant inequalities in health in European countries: people experiencing social and economic disadvantages live fewer years in good health compared to those in more privileged circumstances (Case & Kraftman, 2024; Mackenbach, 2019). Health Promotion (HP) aims to address and reduce these inequalities (Ridde, 2007). Since the 1990's, the field developed numerous interventions aimed at the reduction of health disparities (e.g. Davey et al., 2022). Despite these efforts, health inequalities in Europe have not been satisfactorily decreased and, on some measures, even widened in recent decades (Forster et al., 2018; Mackenbach, 2011). In HP, explanations for the persistence of health inequalities have been sought in attributes

of 'unhealthy individuals', such as intelligence and personality (e.g. Mackenbach, 2010; Qi et al., 2023) and in the failure to design HP interventions at the right level (Lynch, 2017). Others consider neoliberal policies as the cause of persistent health inequalities (e.g. Scott-Samuel & Smith, 2015). The question how the field of HP itself, through its theories and methods and assumptions, contributes to the persistence of health inequalities has not yet been explored. In this article, we address this gap: we examine how HP professionals are trained and consider how their professional training relates to health inequalities.

2. Theoretical background

We draw from three theoretical perspectives: Science and

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<https://doi.org/10.1016/j.ssmqr.2025.100533>

Received 23 August 2024; Received in revised form 23 December 2024; Accepted 20 January 2025

Available online 23 January 2025

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Technology Studies (STS), Critical Sociology of Education, and Critical Public Health. STS scholars have shown that science is not a neutral representation of the reality, but that each scientific discipline has a distinct 'style of thought' that guides a discipline's practices (Knorr Cetina, 1999; Latour & Woolgar, 1979). Kuhn (1970 [1962]) introduced the term 'paradigm' to describe a theoretical frame - composed of a core set of methods, concepts, assumptions, values and practices - that guides research in a particular community. A paradigm directs the formulation of research questions and shapes what qualifies as legitimate solutions. Paradigms tend to be relatively stable over time: successive generations of researchers working in a paradigmatic community produce knowledge that contributes to solving the paradigmatic puzzle, while aligning with the assumptions of the paradigm. As long as contradictory findings remain isolated, they are typically regarded as anomalies and disregarded, thereby allowing the paradigm to persist unchallenged.

According to Kuhn (1970, p. 10ff) and other STS scholars (Felt et al., 2017, p.4), handbooks play a crucial role in socializing researchers and professionals into a specific paradigm: they convey the paradigm's facts, assumptions, methods, tools and theories. Handbooks also instruct professionals to frame problems and solutions in a specific way. Handbooks represent the state of the art of a discipline and their content is obligatory to professionals who want to work in a particular field. Therefore, they significantly influence how new researchers approach, analyse and intervene with specific topics. In this way, handbooks make some actions more plausible and others less so (Asdal & Reinertsen, 2022).

To trace the paradigm into which HP professionals are socialised, we draw from Critical Sociology of Education. Scholars in this field have developed methods to analyse how educational programmes shape a profession's deepest held beliefs. Critical investigations of educational materials are generally guided by three concepts: the formal, the hidden, and the null curriculum (Hafferty & Franks, 1994; Margolis, 2001). The 'formal curriculum' refers to explicitly defined goals, objectives, and competencies, while the 'hidden curriculum' encompasses the implicitly thought customs, assumptions, and attitudes. Hidden curricula often reflect a society's dominant discourses, ideologies, and interests (Giroux & Penna, 1979). For example, multiple scholars have highlighted how stereotypical gender roles embedded in society are reproduced in medical education materials (Arsever et al., 2023; Phillips & Clarke, 2012). Finally, the 'null curriculum' refers to what is omitted from both the formal and hidden curriculum. These omissions implicitly teach students what is deemed irrelevant to their future professional roles (Hafferty & Castellani, 2009). For instance, when the formal and hidden curriculum of medical students do not address social justice, students learn to imagine their professional field as a space where issues of social justice are not discussed, and they are taught that one can be a 'good doctor' without considering social justice issues (O'Donnell, 2016). Tracing hidden and null curricula is considered paramount, as these curricula impact future professionals' education at least as much as the formal curriculum (Cobanoglu & Engin, 2014).

To identify a relevant null curriculum in HP, we draw on debates within Critical Public Health regarding the question of what constitutes 'good health promotion'. We focus on two key notions of 'good health promotion' that emerge in these debates. First, Buchanan (2000, 2008) emphasises that 'dialogue' is essential for good health promotion. He argues that HP professionals should engage in "truly mutual dialogue" with individuals about well-being and the good life. According to Buchanan, such dialogue would foster a humanist and just practice. Second, a growing body of Critical Public Health research advocates for a health promotion that extends beyond individual behaviour change (e.g. Baum & Fisher, 2014; Friedli, 2015). Kriznik et al. (2018) argue that a 'relational epistemology' is essential for fuller understanding of the mechanisms underlying health inequalities, and for the design of effective policies. 'Relational' means to both to consider the relationships that contribute to unhealthy behaviours, including interactions between industry, markets, advertising and the individual, as well as to

acknowledge the systems in which health promotion operates, including the power of other players within these systems. For instance, an intervention aimed at smoking cessation should not only consider individual smokers but also the (power) relationships between individual smokers, markets, the tobacco industry, and advertising, and the effects of these players on the practice of health promotion.

While the formal, null and hidden curricula of textbooks used in medical graduate education have been extensively studied (e.g. Hafferty & Castellani, 2009; Wear, 2006), only few studies can be found about textbooks in graduate public health education (Westbrook & Harvey, 2023). HP professionals conducted critical curriculum analyses of various HP interventions in primary and secondary schools (e.g. McCaughey & Cermele, 2017; Oshrieh et al., 2019), but the hidden and null curricula conveyed to graduate HP students is not yet studied. Therefore, this research studies the paradigm of HP by analysing handbooks used in Dutch HP graduate education. More specifically, we draw on insights from STS, Critical Curriculum Studies and Critical Public Health to analyse the formal, hidden and null curricula of multiple editions of HP handbooks.

3. Methodology

To study HP's paradigm, we focus on handbooks used in graduate HP¹ programmes at Dutch universities, published between 1995 and 2022. The Netherlands offers a compelling case for the study of HP. First, Dutch HP has a relatively long history, having developed as a scientific discipline since the 1960's (Saan & de Haes, 2012 ab). Today, HP is a well-established field in the Netherlands, integrated into various national and local policies and intervention programmes. Each year, a significant number of students are trained to work in this field through a diverse array of bachelor and master programmes, such as 'Health Promotion and Behaviour Change' (University of Amsterdam) and 'Health Education and Promotion' (Maastricht University). Additionally, there are numerous HP minor and specialization programmes at Dutch universities such as 'Analysing and Changing Unhealthy Behaviour' (Erasmus University Rotterdam); programmes and minors at universities of applied science (e.g. the minor 'Health Promotion' at the Amsterdam University of Applied Sciences; 'Strengthen healthy lifestyles' at Ede Christian University of Applied Science); and post graduate education focused on HP (e.g. 'Health Promotion' for nurses at Avans+). Despite their distinctions, all these programmes qualify students for jobs in a wide range of HP settings (De Jong et al., 2010).

Handbooks are authoritative sources that represent a field's paradigm (Felt et al., 2017, p. 4; Kuhn, 1970). Therefore, and inspired by critical curriculum analyses of textbooks (e.g. Tietz, 2007; Cassese & Bos, 2013), we analysed the formal, hidden and null curriculum of Dutch HP handbooks to trace HP's paradigm. The selection of handbooks followed a four-step process. First, we gathered book lists of Dutch universities' programmes which qualify students to work in the field of HP. We found these booklists through electronic curricula on university's websites, and through the main Dutch website which sold study books at the time: Studystore. We selected the most frequently mentioned HP handbooks, written in Dutch. In contrast to most books in English, these handbooks are also used to train HP professionals at Dutch universities of applied science. Second, we sent this list to five teachers and course coordinators from HP programmes at various Dutch universities to assess its representativeness. We asked them whether they recognised

¹ 'Health promotion' is translated into Dutch as 'gezondheidsbevordering'; 'gezondheidsvoorlichting'; and 'GVO', the acronym for 'GezondheidsVoorlichting en -Opvoeding' ['health education and upbringing']. Here, we use the internationally accepted term 'health promotion.' When we quote or paraphrase, we translate 'gezondheidsbevordering' as health promotion and 'gezondheidsvoorlichting'/'GVO' as 'health education' and mention the original Dutch term between square brackets.

our shortlist as an accurate reflection of the handbooks used in their programmes and whether they'd recommended the inclusion of additional titles. Three of the respondents suggested adding the M-handbook to our dataset, which was not included in our original list. Although the M-handbooks are originally written for medical students, they are also used in many HP curricula. Based on the feedback, we revised our shortlists to three titles which, together, represent the core handbooks of Dutch graduate HP programmes. Finally, we selected three editions of each of these titles: the first edition, the most recent edition, and one published in-between these two. As a single handbook is considered a "time lagged measure of the state of a discipline" (Ferree & Hall, 1996, p. 931), the inclusion of multiple editions allows us to examine both continuity and change in HP's paradigm over time. The final set of sources is presented in Figure 1. Lemmers and De Greeff published only two editions of their handbook. In total we analysed eight key handbooks used in HP graduate education, published between 1995 and 2022 (Brug et al., 2000, 2007, 2022; Mackenbach & Stronks, 2008; Stronks & Burdorf, 2021; Van der Maas & Mackenbach, 1995; Lemmers & Greeff, 2018; Lemmers & Greeff, 2022). In the results section, the handbooks are referenced by the codes provided in this figure.

To study HP's paradigm, we performed a qualitative content analysis of handbooks used in Dutch graduate HP programmes. Inspired by critical content analyses of textbooks (Asdal & Reinertsen, 2021; Ferree & Hall, 1996; Harvey & McGladrey, 2019; Westbrook & Harvey, 2022), the analysis was organised as follows. To familiarise herself with the contents, the first author read through all the handbooks. In this phase, she paid specific attention to the book sections that discuss the purpose, scope and main theme of the textbooks: the table of contents; foreword; introduction; and chapter summaries. Sections that convey key messages to readers, such as boxes with 'key messages' and homework assignments with their corresponding answers, were also carefully examined. Notable sections and emerging topics were discussed with the research team. After these discussions, the first author collected the relevant book sections on the following topics: key issues for HP; knowledge ideals; relationships with target groups and sociopolitical actors; dilemmas and struggles of professionals; and reflection on the professional role. The first author collected the relevant book sections on these topics. In this phase, special attention was given to chapters on theories and methods for intervention development, HP theory, and primary prevention, as well as to examples of HP interventions. Subsequently, all authors collaboratively coded the selected book sections, refining the coding iteratively throughout the process. During the analysis, we repeatedly revisited the handbooks to verify our coding.

Following critical curriculum studies (Hafferty & O'Donnell, 2015; Wear, 2006), we made a distinction between what is explicitly described (formal curriculum), what is taught implicitly (hidden curriculum), and what remained unwritten (null curriculum). To identify a relevant part of HP's null curriculum, we used the work of the Critical Public Health scholars Buchanan (2000, 2008) and Kriznik (2018), discussed above, as our starting point. Below, we describe the dominant elements of HP's paradigm as it is taught to future HP professionals through handbooks.

4. Results

The handbooks demonstrated a surprisingly consistent paradigm across different titles and in various editions of the same handbook. Below, we describe three central elements of this paradigm: 1) individual unhealthy behaviour is considered the primary issue in HP; 2) socio-cognitive strategies are recommended to resolve this issue; and 3) HP professionals are attributed professional authority in relation to target groups, but are not ascribed agency in their interactions with sociopolitical actors.

4.1. Making the key issue: individual behaviour

All handbooks teach readers that unhealthy behaviour is the main

concern for HP, and typically present individual behaviour change as the principal solution to this problem. All handbooks reference the growing incidence and prevalence of non-communicable diseases as a primary justification for this choice. Most handbooks attribute this increase in diseases to unhealthy behaviours from the outset. For instance, B2 (p.5) opens with the phrase: "Unhealthy behaviours, such as smoking, excessive alcohol consumption, and insufficient physical activity, are among the leading causes of preventable illness and mortality in the Netherlands."² Similarly, L1 (p.5) asserts:

In recent years, there has been growing attention to health and to the promotion of a healthy lifestyle. (...) Unfortunately, this has not yet translated into healthier lifestyles for all individuals in the Netherlands. Large segments of the population still experience poor health behaviours and reduced life expectancy. These health disparities require our attention.

In general, the M-handbooks presented a broader understanding of disease causation. These books acknowledged the role of behaviour – but only as one of many "significant challenges" (M1, p.49; M2, p.29; M3, p.3, 16). However, in the chapters on HP, this broader perspective becomes more limited. For instance, the chapter on HP in M3 (p.75) begins with the statement that "[a] large portion of common diseases can be traced back to human behaviour. This includes smoking, unhealthy diets, condom use and alcohol consumption, as well as medication use and adherence to therapeutic instructions."

The focus on behaviour as primary explanation for disease subtly shifts into the identification of behaviour change as HP's central task. For instance, in M3 (p.75) one reads: "Many chronic diseases, such as cardiovascular diseases, arise as a result of human behaviour. Healthy behaviours reduce the risk of developing these chronic conditions." After providing several examples of behaviours that promote health, the authors continue: "Health promotion is the discipline dedicated to the promotion of healthy behaviours" (ibid). This line of reasoning – diseases are caused by unhealthy behaviours, healthy behaviours improve health, HP stimulates healthy behaviours – appeared in all handbooks.

That behaviour is consistently presented as the core issue for HP in all handbooks, is particularly evident when examining the definitions given for HP. B1 (p.5, original emphasis) defines HP interventions [gezondheidsvoorlichtingsinterventies] as "activities that can be undertaken to encourage people to voluntarily adopt 'healthier' lifestyles." Similarly, L1 (p.23) describes HP [gezondheidsbevordering] as "any systematic approach to changing the behaviour of citizens and influence their circumstances, with the aim of promoting health or preventing illness." The M-handbooks similarly positioned behaviour as HP's central focus. For instance, M2 defines HP [GVO] as "all combinations of learning experiences intended to encourage healthy behaviour on a voluntary basis" (p.200). The titles of the B and L handbooks further underscore the primacy of behaviour in HP: all editions of the B-handbooks are titled *Gezondheidsvoorlichting en gedragsverandering* [Health Promotion and Behaviour Change] while the title of the L-handbooks is *Gezondheidsbevordering en leefstijl* [Health Promotion and Lifestyle]. Behaviour, in other words, is not just a component of HP, but rather its central focus.

The centrality of behaviour (change) in HP is accounted for in various ways across different handbooks. In some cases, handbooks cite scientific evidence that supports this focus: "Analyses conducted by RIVM [the Dutch National Institute for Public Health and the Environment] show that unhealthy behaviours are a significant contributing factor to several major health conditions in the Netherlands, in terms of burden of disease" (B2, p.55). At other places, handbooks present behaviour change as the most convenient strategy to improve health: "Since intervening in behaviour is easier than addressing other risk

² Translated by ID and BP. All original quotations of full sentences and longer are provided in the Supplementary File.

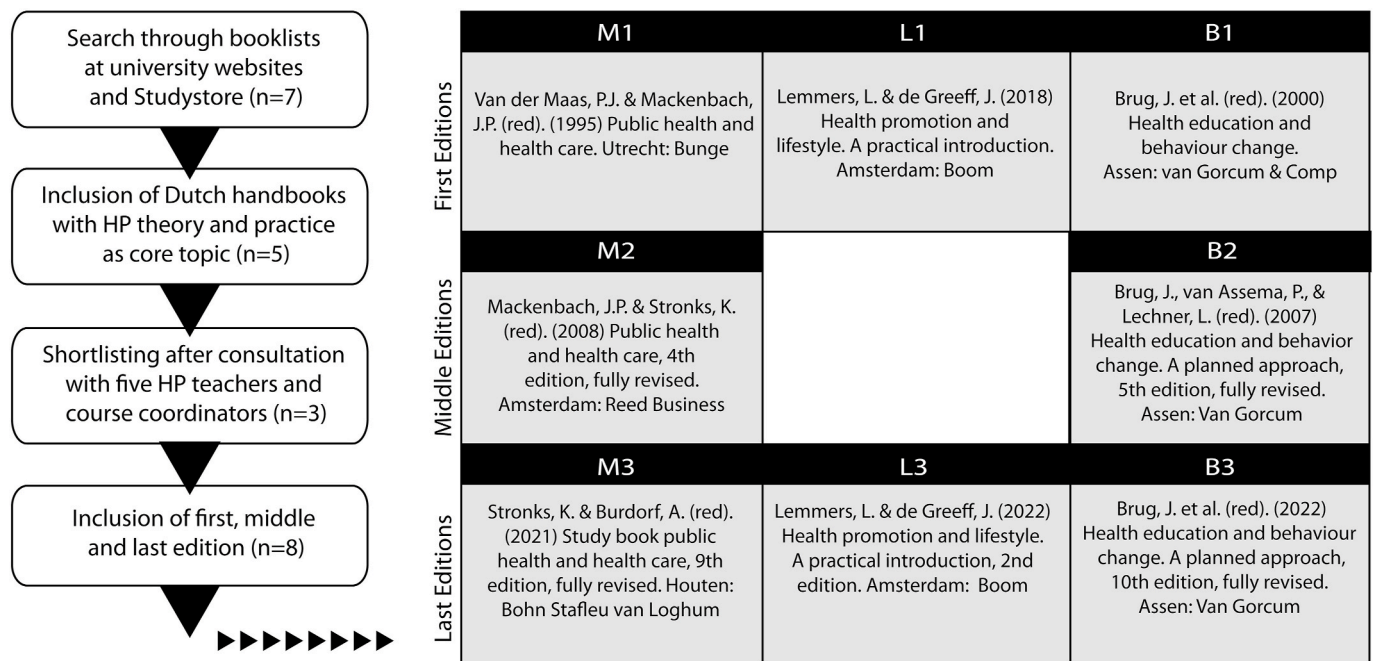


Fig. 1. Selection process and overview of selected sources (titles translated into English).

factors, such as the physical environment, behaviour change is a crucial leverage point for primary prevention and health promotion” (B3, p.61). Elsewhere, handbooks appeal to authoritative sources to legitimise their focus on behaviour change. For example, M2 (p.27) emphasises that “West European and Northern American experts in public health” identified lifestyle factors as the primary threat to public health. Similarly, L1 (p.12) and L2 (p.13) justify their emphasis on lifestyle change by highlighting that the Dutch government has prioritised lifestyle as top priority to improve population health.

The emphasis on individual behaviour as primary concern for HP shapes how handbooks educate future professionals about the causes and prevention of disease. While all handbooks (briefly) acknowledge the role of other health determinants at some point, they neglect most of these determinants in favour of behavioural factors. A notable example is the representation of cancer causes in L2 (p.52), where a pie chart illustrates the relationship between cancer incidence and lifestyle. The accompanying text provides a detailed explanation of the 35% of cancers attributed to lifestyle factors, while the remaining 65% is not addressed. This presentation conveys, implicitly, the message that behavioural aspects of diseases warrant HP professionals’ attention, while non-behavioural explanations can be neglected. Another example of the handbooks’ focus on individual behaviour is found in sections about ‘environmental determinants’. In L1-2 and B1-3 environmental determinants are considered relevant to HP only insofar they influence health behaviour (rather than health directly). For instance, B3 states:

In addition to individual determinants, we will explicitly focus on environmental determinants, *as behaviour does not occur in a vacuum, but within a specific environment* with various physical, socio-cultural, economic, and political characteristics *that can all influence our behaviour.* (p.87, our emphasis)

Similarly, B2 (p.57) highlights the adverse health effects of asbestos exposure. According to the handbook, the role for HP is to “minimise exposure to risky environments *through behaviour change*” (also B3, p.60). No mention is made of HP’s potential role in reducing asbestos emissions. In contrast to the B and L handbooks, M1-M3 more explicitly address how ‘environmental determinants’ - such as pollution, chemical hazards, noise disturbance, road safety, and working conditions - have

direct effects on health. For example, M2 (p.122) explains:

Exposure to noise can lead to discomfort and sleep disturbance, potentially resulting in decreased performance. (...) Additionally, noise exposure may contribute to increased blood pressure and cardiovascular disease through physical stress responses.

Similar statements appear in M1 (e.g. p.95, 142) and M3 (e.g. p.64), but, strikingly, not in the chapters devoted to HP (M2, chapter 4.4; M3, chapter 4). Comparable to the B- and L-handbooks, these chapters consider environmental determinants relevant insofar they affect health behaviour: “In the following paragraph, we will (...) address the environment, *which is important for behaviour.*” (M3, p.78, our emphasis).

Behavioural mechanisms are also presented as the key issue for HP professionals in sections addressing the relationship between socioeconomic deprivation and health. Handbooks L and B repeatedly highlight the relationship between poor health and deprived socioeconomic circumstances, such as living in “cheap rental houses” (e.g. B2, p.57; see also L2, p.58; also B2, p.49-50; B3, p.43-45). However, these circumstances are not made relevant for HP professionals. For instance, L2 attributes socioeconomic health differences to a combination of “differences in social determinants and in lifestyle choices” (p.57). In what follows, these “social determinants” are not further detailed. Instead, the handbook underlines that intervening on individual behaviour is key in the reduction of socioeconomic health differences:

In Dutch regions and (disadvantaged) neighbourhoods with the lowest incomes and the fewest highly educated people, we observe numerous signs of unhealthy lifestyles (...). Reducing health disparities will undoubtedly require a change in lifestyle.

Similarly, B3 presents “unfavourable living circumstances” as “hot-spots” where one can find people with unhealthy behaviours:

(...) poorer neighbourhoods can serve as ‘hotspots’ for populations with the most significant health issues and as ‘breeding grounds’ for initiatives aimed at making it easier to choose healthy behaviours. (B3, p.43; also B2, p.51)

A bit further, B3 stresses this point once more, as it denotes that:

Unfavourable material living conditions affect health negatively through factors such as the daily experience of stress, worries, and feelings of helplessness. These not only directly affect mental well-being and physical health, *but also make it more difficult for individuals to maintain healthy behaviours.* (p.44, our emphasis)

The '(un)healthy behaviours' of people in unfavourable socioeconomic situations remains a returning topic in the handbooks (e.g. B3, p.45 and M3, p.46). An exception appeared in a paragraph on socioeconomic status and COVID-19, in which it is stated that "More cramped housing and less flexible working conditions may have contributed" to the higher mortality among individuals in lower income groups (B3, p.51). However, neither here nor at other points do the B and L handbooks instruct HP professionals to address and resolve adverse socioeconomic materialities. The M-handbooks explicitly highlight the direct and adverse health effects of living in lower socioeconomic circumstances:

Significant disparities are evident in physical working condition, which must certainly be accounted for in the explanation of socioeconomic health inequalities. These disparities include the distribution of physically demanding work across the population, as well as the distribution of dirty, noisy, and hazardous work. (M1, p.102)

People with a lower income more often live in small, damp houses, resulting in respiratory complaints. (M3, p.46)

However, like the other handbooks, M1-M3 also assert that the individual plays a central role in socioeconomic health inequalities. While socioeconomic and environmental explanations did not completely disappear in the newest edition (e.g. M3, p.46), one reads in these handbooks:

Across the world, life expectancy is found to be higher among individuals with high levels of education and income (...). This demonstrates that where one lives *and especially who one is* can have significant impact on one's health. (M3, p.35, our emphasis)

Thus, while the M-handbooks draw attention to the adverse impact on health of socioeconomically disadvantaged peoples' living and working circumstances, they simultaneously teach future professionals that individual behaviour is the key issue for HP.

4.2. Dealing with unhealthy behaviour: sociocognitive interventions

Handbooks for HP maintain that unhealthy behaviour is the most important issue for HP professionals. While various perspectives can be used to understand this issue, all handbooks draw from an individualised and sociocognitive perspective on behaviour, and on an interventionist model of change.

All handbooks underscore the importance for HP professionals to understand the origins of 'unhealthy behaviours'. To this end, all handbooks, except for M1, provide readers with psychological theories and models. B2 (p.75), for instance, asserts: "Understanding the underlying factors or determinants of behaviour is essential for attempting to change behaviour. (...) Our primary focus is on the (socio)psychological determinants that are most common in explaining health behaviour (...)" (see also M2, p.201; B3, p.92) Examples of the models chosen to explain health behaviour include the health belief model (B1, p.59), protection motivation theory (B1, p.61), the model of planned behaviour (B1, p.64; L2, p.61; M3, p.78), and the Stages of Change Model (M2, p.203; B3, p.166). All these models are grounded in sociocognitive psychology, the subfield of psychology that explains behaviour both from a social perspective – examining how individuals' thoughts and behaviours are influenced by others – as well as from a cognitive perspective - focussing on individuals' mental processes, such as cognition and emotion (Baum & Fisher, 2014). The handbooks embrace these models' notion that particular constellations of individual psychological attributes and cognitive variables such as knowledge,

attitude, motivation, beliefs, self-control, and risk perception logically lead to healthy behaviour. For example, when presenting the Health Belief Model flow chart, B1 (p.59) asserts that "individuals' decision to engage in a particular healthy behaviour is determined by the perceived health threat and the evaluation of the recommended behaviour." Comparably, individuals' motivation was presented as one of the key prerequisites to be physically active (e.g. M3, p.79; B3, p.92, 112) and smoking cessation: "An individual must be strongly motivated to resist internal temptations (impulses and cravings) as well as external ones (environmental stimuli). This requires will power and motivation" (L2, p.60). Professionals are taught that 'self-efficacy' "is among the most important individual predictors of many healthy behaviours" (B3, p.96), such as not smoking (B3, p.96; also M3, p.78) and losing weight (B3, p.97).

What applies to the explanation of *healthy* behaviour also holds for the explanation of *unhealthy* behaviours: these too are routinely presented as caused by individual psychological attributes. In B3 (p.95), for example, cigarette smoking is presented as caused or maintained by "irrational' beliefs" - "If I quit smoking I will no longer have any pleasure in my life" (B3, p.95) -, as 'denial' of a problem - "People 'deny' the problem, burying their heads in the sand (...)" (B3, p.99) - and as a "negative intention" towards behaviour change:

Most teenagers who smoke know that smoking is harmful to their health. However, they perceive this as a long-term disadvantage ("cancer or a heart attack is something for old people (...)"). Their overall attitude towards smoking then remains positive, which can foster a negative intention to change behaviour among smokers (...). (B3, p.99)

The message conveyed to readers is that (un)healthy behaviours are individual choices, shaped by personal psychological attributes.

Individual psychological attributes are also employed to explain behavioural differences between socioeconomic groups. Some handbooks contend that stressors of people with a low socioeconomic status impairs their 'bandwidth' (i.e. cognitive resources) to make healthy decisions. For instance, in L2 we read about people in "disadvantaged positions":

According to the scarcity theory, these individuals have limited mental or cognitive bandwidth. This limited bandwidth often results in decisions and choices that favour short-term benefits. The long-term disadvantages (such as a shorter life due to an unhealthy lifestyle) are pushed into the background. (p.181)

Similarly, B3 (p.163) asserts that individuals in disadvantaged circumstances and those facing financial problems experience high levels of stress, resulting in "limited mental capacity to consider eating fruit and vegetables or quitting smoking." Such statements direct readers' attention to perceived deficits in the cognitive functioning of people living in disadvantaged circumstances. There are some exceptions. While the B and L handbooks highlight the impact of 'unfavourable living conditions' on brain functioning, M1-M3 are less explicit about an (alleged) cognitive dysfunction within lower socioeconomic groups. These handbooks attribute 'unhealthy behaviours' of lower socioeconomic and migration groups to cultural differences, as well as to discrimination (e.g. M3, p.47). However, in the most recent edition, M3 (p.46) also adopts a sociocognitive explanation to explain behavioural differences between socioeconomic groups: it states that economic recession may lead to financial problems and stress, which makes it more difficult to quit smoking. Handbooks thus teach HP professionals that individual sociocognitive attributes play an important role in socioeconomic differences in health behaviour.

All handbooks acknowledge that a combination of multiple strategies enhances the effectiveness of HP interventions. One example is the combination of policy measures and individual behaviour change mentioned in M3 (p.83): a legislative ban on alcoholic beverages along with education about the health risks of alcohol. However, the majority

of examples of existing interventions instruct future professionals to target interventions at individual psychological attributes. For instance, the intervention ‘SMARTsize’ “focuses on improving the skills and capabilities of people with overweight or obesity” through “awareness of personal behaviours and risk factors; self-regulation; behaviour change; skills training; and adaptation of the physical home environment” (L2, p.285). The intervention ‘Mentally Fit’ uses “self-management, cognitive behavioural training and relaxation exercises” to reduce stress (L2, p.305). B3 (chapter 5) teaches professionals to develop an intervention by using the example of an existing sexual health intervention: “Lang Leve de Liefde” [Long Live Love]. This programme aims to modify individual psychological determinants: programme goals are directed at individuals’ knowledge and risk perception (“Know when it is necessary to test [for STDs]”), attitudes (“Develop a positive attitude towards the correct and consistent use of contraception in addition to condom use”), affect (“Describe the positive feeling associated with the certainty of using contraception correctly and consistently”), self-efficacy and skills (“Identify strategies to ensure you use contraception correctly and consistently”), and social norms (“Experience support from significant others in communicating desires and boundaries”). All these examples use individual psychological traits as leverage points to achieve the desired behaviour change.

We demonstrated how handbooks present unhealthy behaviour as HP’s main concern and teach future professionals to explain these behaviours using sociocognitive theories and models. Furthermore, they instruct students in HP to develop interventions that target individual psychological traits. Consequently, HP professionals learn to view individuals with their unhealthy behaviour as the central object for intervention, and individual psychological interventions as primary solution. The key message conveyed to future professionals is that teaching unhealthy individuals the right sociocognitive traits would enable them to make healthy choices and, consequently, to behave healthily.

Handbooks’ choice to use psychological models to understand and change unhealthy behaviours is accounted for in various ways. At times, psychological determinants were referred to as common practice (B2, p.75). In other instances, psychological determinants of health were considered more easily and more cheaply ‘modifiable’ compared to sociocultural, biological, and cultural determinants of health: “Psychological determinants of behaviour are generally considered manipulable and, as such, are viewed as suitable starting points for behaviour change.” (M2, p.201). B3 further elaborates:

Health promotion often focuses on controlled processes and determinants that can be influenced and altered through health education [gezondheidsvoorlichting]. (...) Typically, distal factors, such as a person’s personality or the sociocultural environment, are much more difficult to change than proximal factors. (p.92)

Sometimes, the emphasis on psychological theory and methods remains unexplained (e.g. L1, p.53), as if it does not require theoretical or ethical legitimization or debate.

4.3. Relating differently to target groups and socio-political actors

Professional fields are always related to the citizens or clients they work with, but also to broader institutional environments and other professional fields. As these relationships are inscribed in a paradigm, future professionals are socialised in a particular web of relationships. How are professionals in HP trained to understand relationships with target audiences and with sociopolitical actors?

Given that HP’s primary issue as it is articulated in professional education pertains to the unhealthy behaviour of individual, it is unsurprising that the handbooks focus on relationships with ‘target groups’. Across the handbooks, the ‘target group’ for HP interventions includes a variety of populations. In the case of collective or universal prevention, the full population is identified as target group of HP (e.g. M2, p.193;

M3, p.60; L1, p.76). More often, ‘target groups’ refers to populations that face an increased health risk (e.g. pregnant women, people with chronic diseases (L1, p.77; L2, p.226)) or those with certain ‘unhealthy conditions’ (e.g. diabetes type-2 or obesity [L1, p.126]). Additionally, individuals with ‘unhealthy’ or ‘risky’ behaviours are considered target groups for HP (e.g. smokers (M2, p.208)), as are populations at risk of adopting such unhealthy behaviours (e.g. children of parents who smoke (L2, p.225)). Sometimes, a population may be considered a target group for multiple reasons. For instance, people with a ‘lower socioeconomic status’ are viewed as target group because of socioeconomic risk factors for disease (e.g. poor housing conditions), their ‘known’ ‘unhealthy behaviours’ (e.g. smoking) and their (presumed) increased risk at certain conditions (e.g. heart attacks or depression) (L1, p.52, B1, p.235). Frequently mentioned target groups included youths, ‘lower educated people’ or, more broadly, people with a ‘low socioeconomic status’ (e.g. L2, p.203, 298; B3, p.163).

The handbooks articulate that ‘target groups’ need supervision and support. HP professionals’ guidance is considered crucial to enable individuals to recognize their unhealthy behaviours, and to foster and sustain their motivation for behaviour change. All handbooks contain general statements regarding this support. For example:

Health promotion professionals (...) can help individuals, for example, to map out their lifestyle and its consequences (...) and then guide them through the behavioural change process and its evaluation. (B3, p.176)

According to L2, “The professional can do much to promote health: inform, educate, signal, motivate, guide and collaborate” (p.144). Similarly, M3 repeatedly states that professionals “support people in their behaviour change” (e.g. p.82, 76), and B2 (p.6) underlines: “With health education we try to inspire, train and support people to behave healthily.” The idea that target groups need HP professionals’ support to become and stay motivated for behaviour change is expressed at many places. L2 maintains:

However much the professional may wish to contribute to clients’ health, it is essential that the clients themselves are motivated to work on their own health. Therefore, this chapter explains (...) strategies to enhance clients’ intrinsic motivation. (p.144)

Thus, the handbooks imagine a world in which target groups are in need of professionals’ support and in which professionals guide them to improve their health behaviour.

To foster motivation amongst target groups, the handbooks offer professionals many tools to grasp target groups’ attention. These tools include tailoring to individual wishes and values (e.g. B2, p.125; L2, p.147); “persuasive communication” (B3, p.167); rewarding target groups (e.g. B2, p.125; M3, p.76) and scaring them (B3, p.235; M3, p.87). Motivational Interviewing was regularly presented as tool to “elicit” internal motivation from the target group (L2, p.147; also M3, p.101) and to help people with “health problems that are often caused by a lack of self-regulation” (B2, p.130). In the L-handbooks, Motivational Interviewing is even called “the professional’s basic skill” (L1, p.130; L2, p.146). These tools assume and construct one-way processes through which professionals can and should steer target groups towards behaviour change.

Ethical limitations of this unidirectionality are occasionally discussed in handbooks. In these sections, individual autonomy is one of the frequently discussed ethical values. For instance, B3 asks: “But is it acceptable for a public health professional to pressure people about healthy behaviour when they haven’t asked for it? (...) This is one of the key dilemmas faced by public health professionals.” (p.17). Other handbooks also address this point (e.g. B1, p.31; B2, p.31, M3, p.88). However, the image of the HP professional as an expert who guides unhealthily behaving, unknowable and unmotivated individuals is held upright in these discussions by aligning the aim of HP to stimulate healthy behaviour with the ethical notion of autonomy. For instance, B3

discusses when an individual's autonomy may be restricted:

Are individuals autonomous when they do not realize that eating habits are unhealthy? Do we enhance their autonomy by confronting them with unsolicited, correct information? Intervention methods should not intentionally undermine the autonomy of the target group, for example by providing one-sided information (...). Most educators are convinced that their intervention contributes to greater autonomy of the individuals being educated. (p.17; also B1, p.31; B2, p.31)

Here, the handbook considers professionals' interventions crucial to enable healthy choices, which apparently legitimises unsolicited interventions. This type of ethical reasoning reifies the position of HP professionals as experts, and the assumption that target groups lack both knowledge and motivation to behave 'healthily' – illustrated by the term 'correct information' in the quotation above. Similarly, the handbooks discuss the value of participation or 'working with the community'. For instance, in the chapter "Health Promotion [Gezondheidsbevordering] in the Community," L1 and L2 prompt HP professionals to "work together with citizens on health promotion" (L1, p.150, L2, p.172). However, in the list of "relevant actors" in communities, these citizens are conspicuously absent (L1, p.152-155; L2 p.174-178). Much like the value of respecting autonomy, the value of participation is made instrumentalised to support an interventionist top-down approach. In one edition of one handbook, one chapter is dedicated to "the community approach for HP interventions [GVO interventions]." Yet, communities are presented as "'location[s] of discovery' (...) for certain health issues and target groups" (p.173) and participation is framed as a "strategy that gives people the *feeling* that they can contribute to solving their own problems" (p.183, our emphasis). Rather than adopting the radical and transformative understanding of participation as it is employed in other subfields of Public Health (e.g. [Minkler & Wallerstein, 2011](#)), this chapter utilises participation for its own purposes: encouraging individuals to behave healthily. This chapter is rather detached from the rest of the handbook, where an individualistic approach is dominant and no references to social relationships and community interaction are made. Unsurprisingly, the chapter vanishes again from later editions.

The handbooks teach HP professionals that they are the experts, and that target audiences urgently need their knowledge and support to change their behaviour. The methods and tools offered to readers assume a one-way process through which professionals direct target groups. Approaches that could challenge this interventionist top-down approach—approaches that for instance stress the value of autonomy and participation—are employed to reinforce these interventionist ideas.

Handbooks also familiarise students with the sociopolitical context that shapes HP practices and teach them how to relate to sociopolitical actors. Here, we discuss two key actors: the Dutch government, and the food and tobacco industries. While HP professionals are presented as 'leading experts' in relation to target groups, they are presented as submissive in relation to these sociopolitical actors.

All handbooks convey to professionals that HP takes place within national policy frameworks. For example, L1 states: "In the Netherlands, the national government largely determines the frameworks for prevention, and thus also for health promotion" (p.79). Notably, the handbooks portray the relationship between the Dutch government and HP almost exclusively in terms of the influence of the first on the latter: the government is presented as funder, legislator, and priority-setter for HP (e.g. B2, p.147; L1, p.79; M2, p.437; M3, p.62, 78). Only in a few instances do handbooks suggest that professionals can act as partners for policymakers and influence policy. B2, for instance, states: "When essential provisions for individual behavioural change are lacking, when changes in environmental conditions are needed, or if existing legislation conflicts with individual behavioural change, an HP professional may attempt to change the relevant laws and regulations" (p.147). The

authors mention "advocacy, lobbying and agenda setting" (p.148) as methods for HP professionals to influence the policy domain. However, in sharp contrast to the extensive and detailed descriptions of how HP professionals should intervene with individual behaviours, the handbooks provide little detail on how HP professionals can engage in advocacy (also B1, p.115; B2, p.144). B3 emphasises that professionals should be prepared to set agendas for new policies and modify existing policies "requested or not" (B3, p.184). Yet, no further details are provided on how to modify political agendas.

At times, handbooks highlight the negative influence of national policies on HP. M1 (p.207), for instance, points at "policies' capriciousness" as one of the reasons for a lack of continuity in HP interventions, while B1 (p.19) states that the government "is not always at the forefront in fighting health threats," due to its dependence on unhealthy behaviours through taxes levied on alcohol and tobacco. In this context, policymakers are occasionally presented as a potential target group for HP. The desired 'behaviour' of policymakers is, for instance, the provision of clean needles to reduce HIV infections (B3, p.5); the implementation of anti-smoking policies (B3, p.88); or "influencing legislation regarding fast food advertisement during children's television programmes" to reduce obesity amongst children (B2, p.125). However, the handbooks do not offer concrete examples of advocacy practices or tools for developing such practices.

A similar pattern can be observed in how relationships between HP professionals and food and tobacco industries are depicted. The handbooks acknowledge that these industries impact health – often negatively – but offer hardly any tools or methods to HP professionals to address this issue. While reducing the consumption of sugar, unhealthy (fast) foods, and tobacco by individuals is a key topic in all handbooks, the industries that produce these products are not considered target groups for HP. Occasionally, authors express concerns about the powerful advertising strategies employed by these industries (e.g. M1, p.223; B1, p.19; B3, p.234; L1, p.37). Despite these concerns, none of the handbooks equips future professionals with the tools to challenge the influence of these industries. On the contrary, HP professionals are taught to consider the potential positive role these industries can play in health, as exemplified in B3:

Often organizations or individuals who play a significant role in the emergence of a problem are also a stakeholder in finding a solution to the problem. Obesity is a good example. (...) Organizations in the food industry [are] part of the problem (for example through marketing sugary drinks to children), but also part of the solution (developing tasty and trendy drinks without sugar). (p.199)

Handbooks thus instruct professionals to be aware of the health damage caused by products but do not teach them how to actively alter the actions of the industries responsible for making these products.

HP professionals encounter diverse 'others' in their work. Handbooks set very different expectations for how to engage with each of them. While HP students are taught to actively and authoritatively steer target groups towards behaviour change, they are encouraged to adopt a rather passive or even submissive stance when interacting with the national government and (health damaging) industries.

5. Discussion

This study aimed to gain insight in how HP itself, through its central theories, methods and assumptions, may have played a role in the persistence of health inequalities. To that purpose, we analysed the paradigm of HP into which future HP professionals are socialised. We analysed multiple editions of three key handbooks commonly used in Dutch graduate HP education, published between 1995 and 2022. Drawing on STS and Critical Curriculum Studies, we explored the formal, hidden and null curricula into which Dutch HP professionals are socialised. Our analysis shows that Dutch HP is characterised by a surprisingly consistent, individualistic, behavioural and psychologised

paradigm that prioritises top-down interventions. This implies that successive generations of HP professionals were educated in the same paradigmatic approach. Kuhn (1970) has shown that, as scientists are socialised into a specific paradigm, the paradigm is deeply ingrained in the scientific-professional community and cannot be easily changed. The handbooks that convey this paradigm are still used today in Dutch graduate education, training the HP professionals of the future. Therefore, the paradigm that we identified is likely to remain influential in Dutch HP in the years ahead.

The formal part of this paradigm teaches future HP professionals that unhealthy individual behaviours are the discipline's primary concern, and that HP professionals are experts capable of instilling the right attitudes in these individuals. The hidden curriculum confirms this individualistic approach: the uncritical adoption of methods such as persuasive communication and Motivational Interviewing implicitly positions HP as top-down, unidirectional, interventionist, and non-collaborative practice. Further, the abundant and unreflective use of socio-cognitive models conveys the assumption that the 'right' attitudes – such as motivation, self-efficacy and knowledge – will naturally lead individuals to adopt healthy behaviours. While the detrimental impact of health damaging activities of industries and of certain national policies is acknowledged, the handbooks implicitly teach future professionals that industries and policymakers hold greater power than professionals, and are beyond the influence of health promoters. Thus, while individuals are targeted for behaviour change, actors that responsible for significant harm to public health are left unaddressed. Justifications of these choices remain limited to considerations such as convenience, ease and cost-effectiveness.

Discussions that can be considered as highly relevant to the field of HP but are not represented in the handbooks constitute part of HP's null curriculum. We specifically considered the concept of dialogue as introduced by Buchanan (2000, 2008) and the attention to relational epistemology as suggested by Kriznik et al. (2018). It is noteworthy that, while HP professionals focus on individuals, dialogue is entirely absent from all handbooks. Target groups are presented as objects of change and their communication with professionals is reduced what Buchanan (2000, p. 152) describes as "being fed information". In this unidirectional communication model, reflective inquiries about the meaning of health and the nature of a 'good life' are precluded. Furthermore, Kriznik's (2018) relational epistemology - i.e. consideration of the power relations that contribute to unhealthy behaviours, including those between industry, markets and the individuals - has no part in Dutch HP. While the handbooks do mention the detrimental effects on health of powerful actors such as the sugar and tobacco industry, none of them teaches professionals to solve 'unhealthy behaviour' by intervening on these actors directly. On the contrary, 'unhealthily behaving individuals' are perceived as lacking the capacity to effectively navigate these power dynamics, as evidenced by their 'irrational beliefs' and 'denial of the problem.' HP professionals are also not taught to critically assess and address the relationships within which they operate. Our analysis also reveals that Dutch HP predominantly relies on theories and methods from psychology and communication studies while neglecting scholarly fields that are reflexive about power relationships in and between science and society. This null paradigm reinforces the rigid disciplinary boundaries of Dutch HP's individualistic paradigm: it enhances its internal coherence but fails to provide room for reflection on HP's paradigm.

Our findings resonate with Westbrook and Harvey's (2023) recent analysis of handbooks used in public health education in the US, which similarly identified a "prevailing behavioural fundamentalism" in the content presented to future professionals regarding health promotion. While their study included a greater number of handbooks than ours, the authors included only the handbooks' most recent editions. Our analysis demonstrates that, at least in the Netherlands, this individualistic behavioural approach paradigm has been dominant for several decades. Considering its paradigmatic character, its influence is not likely to

reduce soon.

Generations of HP professionals endeavored to reduce health inequalities. However, numerous scholars have shown that the core elements of HP's paradigm – individualisation, behaviourism, psychologization, top-down interventionism, and the failure to engage with alternative forms of knowledge – are inadequate for addressing health inequalities. These scholars emphasise the necessity of addressing social dynamics such as poverty and racism (Baum & Fisher, 2014; Douglas, 2015; Marmot et al., 2008; Mbulaheni & Sobers, 2023). Others contend that mere reliance on psychological attributes such as motivation, self-efficacy etc. as explanation of differences in health is detrimental as well as ineffective to reduce health inequalities. A shared concern among these scholars is that psychological theory and methods reduce ill-health to a 'mindset issue' where disease is understood as the result of poor individual choices and failed personal responsibility, while overlooking the impact of external circumstances, such housing, employment, income and social status (Friedli, 2009, 2015). Also, psychological explanations position 'irresponsible individuals' as the primary agents of their unhealthy condition and allows them to be individualised and problematised (Pykett, Jones, & Whitehead, 2016). Frankenhuis and Nettle (2020) argue that such deficit models fail to recognize the talents and abilities that people facing (socioeconomic) adversity might develop to navigate challenging circumstances, such as optimism, self-control and motivation to succeed, and the ability to maintain relationships (see also Ellis et al., 2017). While strengths-based approaches are not without their own unintended consequences (e.g. Friedli, 2013), Friedli (2012) underlined that these approaches' insistence on the 'power of the human spirit' and their commitment to value disregarded individuals could offer new avenues to tackle health inequalities. Other scholars insist that institutional and structural reforms are required to reduce health inequalities, particularly through addressing inequalities in power, privilege and resources (DeJoseph et al., 2024; Friedli, 2015). Critical public health scholars have repeatedly called for more advocacy and policy impact from health inequality researchers to facilitate such interventions (Bambra et al., 2011; Cohen & Marshall, 2017; Garthwaite, Smith, Bambra, & Pearce, 2016; Minkler & Baden, 2008; Smith, Hill, & Bambra, 2016). Although we support this call, our study shows that the Dutch HP paradigm does not prepare professionals for such tasks, conceptually nor practically.

In Science and Technology Studies, scholars like Gieryn (1983) have demonstrated how continuous boundary work is carried out to distinguish 'rational' scientific expertise and 'valuable knowledge' from 'irrational' beliefs and ideas held by lay people. He showed how these practices tend to overlook the value of knowledge possessed by users and citizens, which is not grounded in or legitimised by scientific work and academic qualifications. STS scholars argue that 'ivory tower thinking' and the failure to acknowledge and engage with diverse types of citizens knowledge a key driver of distrust in experts (Jasanoff, 2022; Shapin, 2004). Citizen science has been introduced as one route to improve scientific practices and to strengthen the democratic character of science (Raap et al., 2024). From the perspective of this STS scholarship, the Dutch HP paradigm embodies a pronounced form of 'ivory tower thinking', which undermines the engagement of the 'unhealthy behaving populations' that HP seeks for. Professionals are not taught to invite 'target populations' for an open dialogue to share their ideas about the meaning of health, or about the processes that affect their health and wellbeing. The way the paradigm frames these 'target groups' (unmotivated, unknowable, etc.) renders them not only unhealthy, but also unfit for meaningful dialogue. According to Fricker (2018) and Honneth (2022), recognizing others as credible and intelligible persons with epistemic integrity is a prerequisite for justice as well as for individual and societal development. If others are judged by stereotypes or prejudices, rather than recognised as knowers, stereotypes that cause epistemic misrecognition can create a casual loop and will cause harm. We contend that the paradigm of Dutch HP may harm 'target groups' by failing to acknowledge their position as

knowledgeable agents. Accordingly, the authoritative and stigmatizing character of Dutch HP's paradigm is fails to contribute to the decrease of health inequalities.

Our study has some limitations. To analyse the paradigm of HP we focussed on handbooks. Interviews with authors and publishers regarding decisions about the in- and exclusion of specific topics in the handbooks – such as inclusion of the community approach in B2 and its exclusion in B3 - would be a valuable addition. Further, HP professionals are socialised into the paradigm not only through handbooks but also through formal, hidden, and null curricula in classrooms and internships. It would be interesting to study how these handbooks are used in everyday educational practice and whether the curricula in classrooms and internships reinforce or challenge the paradigm we identified. Finally, this study concerned handbooks used in Dutch HP education. An international comparison would be valuable. Ultimately, despite these limitations, we are confident that the handbooks that we retained for analysis represent Dutch HP's paradigm.

6. Conclusions

According to Kuhn (1970), scientific disciplines socialise scientists and professionals into a paradigm – a core set of embodied assumptions, concepts, values and methods that guide their practices. Our analysis demonstrates how handbooks used in Dutch graduate HP education over the past three decades have socialised future Dutch HP professionals in an individualistic, behaviourist, psychologised, and interventionist paradigm. HP professionals are taught to regard themselves as authoritative experts able and responsible for guiding 'unhealthy, unknowable and unmotivated' target groups towards healthy behaviours. At the same time, professionals are not taught to challenge health damaging social-political actors, or to critically reflect on the assumptions embedded in HP's theories and methods. HP's narrow and unreflective paradigm implies a rather blind eye for the stigmatizing character of its own practices and its role in the persistence of health inequalities. As such, the field undermines its ability to address the structural issues that perpetuate these inequalities. As long as HP professionals continue to be socialised in this paradigm, Dutch HP is unlikely to make a significant contribution to tackling health inequalities.

CRedit authorship contribution statement

Ilse Dijkstra: Writing – original draft, Methodology, Formal analysis, Data curation, Conceptualization. **Bart Penders:** Writing – review & editing, Visualization, Methodology, Conceptualization. **Klasien Horstman:** Writing – review & editing, Methodology, Conceptualization.

Ethical statement

Ethics approval was not required for this study.

Funding

This work was supported by the Dutch Research Council (PGW.23.026).

Declaration of competing interest

The authors have no conflicts of interest to declare.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ssmqr.2025.100533>.

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