Sustainability in the context of the UK pharmaceutical industry (2000-2020): Media representations and stakeholder perceptions

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I confirm that the work submitted is my own and that appropriate credit has been given where reference has been made to the work of others.

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Abstract

Corporate sustainability requires clear and efficient communication between companies and their stakeholders. For some companies and sectors, it is difficult to establish this line of communication because of structural obstacles and sector-related detachment, which results in ambiguity about their sustainability credo. In such cases, social evaluators take on the role of disseminating and evaluating corporate sustainability. This research proposes a qualitative, longitudinal study in such context (pharmaceutical industry in the UK), first to examine how social evaluation and the engagement of social influencers play out in the setting of joint multi-stakeholders sustainability projects, and then to examine how the ultimate agents of social evaluation and influence (the mainstream media) frame the corporate sustainability discourse, thus shaping the public opinion about the corporate sustainability of the sector. The research is divided into three separate but related studies and it found that in sustainability projects success depends on the right choice of engaged social influencers, their personal characteristics and motivation, but also on contextual circumstances and the ability to advertise the project via media and other outlets. As for media framing, the overall media interest in sectoral sustainability grew over time and it was generally evaluated positively. Rather than on environmental issues, the media focused on core sectoral characteristics, its significance and the importance of their product, on cooperation and collaboration and on the role of the executives in sustainable transformation. As for dominant storylines, the media highlighted the dominance of business logic on one side and the sense of moral superiority on the other as barriers to meaningful communication and cooperation, and on the necessity of the media to act as honest brokers and facilitate the rapprochement between the sector and the stakeholders.

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List of abbreviations

ABPI - *The Association of the British Pharmaceutical Industry*

AIDS - Acquired immunodeficiency syndrome

AZ - *AstraZeneca*

BBC - *The British Broadcasting Corporation*

CEO - Chief Executive Officer

CO_2 - Carbon dioxide

COPD - Chronic obstructive pulmonary disease

CS - Corporate sustainability

CSR - Corporate social responsibility

ESG - Environmental, social, and governance

EU - The European Union

FTSE - *The Financial Times* Stock Exchange

GHG - Greenhouse gases

GSK - *GlaxoSmithKline*

HIV - Human immunodeficiency viruses

LDC - Least developed countries

MSF - *Médecins Sans Frontières* (*Doctors Without Borders*)

NGO - Non-governmental organization

NHS - *The National Health Service*

NICE - *The National Institute for Health and Care Excellence*

R&D - Research and development

RBV - Resource-based view

SDG - Sustainable development goals

UK - The United Kingdom

UN - The United Nations

US - The United States

WCED - *The World Commission on Environment and Development*

WHO - *World Health Organization*

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1. Chapter 1 – Introduction

The modern world is rapidly changing. The overall positive developments in the late 20th and early 21st centuries were characterized by scientific advancements and technological breakthroughs and were coupled with widening horizons for communication, cooperation, wealth creation and more just distribution. However, they were intersected with global and regional political crises, social unrests, healthcare emergencies and, maybe most importantly, the rapid deterioration of the natural environment, manifested in the rising levels of greenhouse gas emissions, global warming and climate change, pollution of the air, water and land, loss of biodiversity and many other ways (Ader, 1995; Basiago, 1995; Scheffer et al., 2001; Robinson, 2004; Swart, Raskin & Robinson, 2004; Lenton et al., 2008). General scientific consensus is that the negative impact on the environment is the result of the way humans envisioned their lives and organized their production and consumption – with low regard for the limitations for planetary boundaries to both provide for resources and act as a sink for negative externalities (Torgerson, 2000; Hoekstra & Wiedmann, 2014). Facing the existential crisis that threatens to bring an end to the world that we know, individuals, policy-makers, businesses and other organizations are lining up to engage in the process of sustainable transformation – setting up the new standards of production and consumption based on the concepts of good environmental stewardship, long-term planning, social justice and international cooperation (Robinson & Tinker, 1998; Wilkinson, Hill & Gollan, 2001; Ott, 2003; Swart, Raskin & Robinson, 2004; Nidumolu, Prahalad & Rangaswami, 2009; Stoughton & Ludema, 2012; Bonnedahl & Heikkurinen, 2018).

The business sector was for a very long time perceived as one of the biggest obstacles for achieving more sustainable world (Russell, Padfield & Bretter, 2023). As their task was to provide for goods and services required by people and because of the dominant corporate logic that dictated that companies should only care for maximising the profits for the owners and the investors, the business sector was naturally replicating and resonating the harmful paradigm of overexploitation and overconsumption. However, faced with both the backlash from their stakeholders and the prospects of environmental uncertainty putting their business activities in danger, the vast majority of businesses have accepted that something had to be done to mitigate the damage that was already caused and to establish rules, mechanisms and protocols for more sustainable approach to production and consumption (Elkington, 1997; Dyllick & Hockerts, 2002; Lubin & Etsy, 2010; Miklian, 2019; Fet & Keitsch, 2023; Fischer et al., 2023). Overriding the tension coming from the inevitable collisions of the concepts of growth and the natural resource/sink limits, the concept of sustainable development emerged, which combined the existing imperatives for good environmental stewardship, economic vitality and social advancement (Robinson & Tinker, 1998; Swart, Raskin & Robinson, 2004; Kates, Parris & Leiserowitz, 2005; Lindenfeld et al., 2012; Newig et al., 2013). Thus, the consensus exists that all societal actors have a responsibility to take care of the environment, to support social advancement, to think about the future and to cooperate in order to achieve those set goals (Elkington, 1997; Clark, 2001; Wilkinson, Hill & Gollan, 2001; Lubin & Etsy, 2010). When the concept of sustainable development is operationalised by the business sector via corporate strategies, plans, programmes and projects, it becomes corporate sustainability or corporate social responsibility (CSR) (van Marrewijk, 2003).

As the business sector has been identified as a crucial actor in the process of sustainable transformation (George et al., 2016b), the companies strive to change their behaviour via CSR initiatives and projects (Wiek et al., 2012; Sabini, Muzio & Alderman, 2019; Barendsen, Muß & Silvius, 2021). The processes of acceptance and especially the institutionalization of corporate sustainability practices have been inconsistent, but it is fair to say that many companies have responded proactively, recognising the paradigm shift and viewing sustainability either on normative grounds (Clark, 2001; Wilkinson, Hill & Gollan, 2001; van Marrewijk, 2003; Waddock, 2008; Sharp & Zaidman, 2010) or as a possible source of competitive advantage (Vogel, 2005). Following on this transformation, businesses tend to engage in increasingly complex governance systems that combine national and international regulation and control with a variety of voluntary, market-based elements (Vogel, 2010; Bartley, 2014). This intersection of the sustainability governance and public pressure, or 'market for virtue' (Vogel, 2005), demands that the significant portion of the responsibility for overseeing, guiding and pushing the businesses towards sustainability should be transferred to companies' stakeholders and, most notably, towards conscious consumers (Daley, 2007; Pirard, 2012; Von Geibler, 2013; Heikkurinen et al., 2019). The overall expectation is that through their purchasing power the conscious consumers will act as social evaluators and either reward good sustainability performance or punish poor sustainability performance (Hansen & Schrader, 1997; Orlitzky, Schmidt & Rynes, 2003; Pomering & Dolnicar, 2009; Young et al., 2010; Amel-Zadeh & Serafeim, 2018; Lu et al., 2023), hence pushing the companies onwards in the process of transition to sustainability. This then assumes that being more sustainable actually brings companies a set of tangible and intangible benefits and that it is actually in companies' interest to engage in sustainable transformation (Sen & Bhattacharya, 2001; Dyllick & Hockerts, 2002; Barkemeyer et al., 2014; Bartikowski & Berens, 2021).

This perspective was very interesting for researchers and scholars, as the possibility that CSR engagement is not only beneficial for the environment and social institutions but also for the corporate financial performance, would create a 'win-win' paradigm, almost a conceptual self-reinforcing 'prepetuum mobile' driver for sustainable transformation, where all the costs and trade-offs would be considered as a simple business investment. A number of scholarly articles deal with how the traditional indicators of business success (accounting and market based), such as the firm capitalisation, returns and profit margins correspond or correlate with different sets of sustainable performance indicators (Margolis & Walsh, 2001; Orlitzky, Schmidt & Rynes, 2003; Galant & Cadez, 2017). The relationship between corporate social responsibility and corporate financial performance still remains controversial (McWilliams & Siegel, 2000; Orlitzky, Schmidt & Rynes, 2003; Hull & Rothenberg, 2008), but many works point out that there is a positive corelation between corporate sustainability performance and corporate financial performance, especially with the employment of consistent, clear strategies that focus on crucial stakeholders (Edmans, 2012; Tang, Hull & Rothenberg, 2012).

The existing models in research of corporate sustainability employ different sets of control variables. Some variables refer to the corporate organisational structure or financial significance (such as type of company, capitalisation, number of employees). Some employed variables are there to provide for contextualisation (for example, geography or culture). In any case, control variables are there to provide for more variability for sounder conclusions. One important variable, especially related to sustainability, is corporate sector affiliation. Corporate sustainability performance, and thus the perception of sustainability by any company, is related to their core activities (management of resources and externalities) and how they interact with stakeholders and communities. For certain companies and sectors, it is not hard to establish and evaluate their environmental footprint or social significance. Core business activity associated with negative environmental impact or negative social impact automatically leads to contested legitimacy, pointing out to structural flaws and the perception of long-term unsustainability (Galvin, Ventresca & Hudson, 2004). On the other hand, some sectors and industries display greater ambiguity, especially those that are detached from their customers and other stakeholders, such as, for example, the pharmaceutical industry.

Environmental and social characteristics of the sector are important when thinking about sustainability, especially the process of stakeholder evaluation and establishment of market-based governance systems, as those characteristics are the fundamentals for the analysis and social evaluation and represent a base for stakeholders forming their opinions and push for change. Different sector-level dynamics lead to different outcomes. Sector-level specificities and characteristics which make every industry unique to a certain extent, have huge impact on how companies and the sector itself understand their goals and missions, how companies shape their identities, proceed with sensemaking leading to the establishment of their dominant logics, which, subsequently, express in their business and sustainability strategies (Levy, 1995; Ochsner, 1998; Hoffman, 1999; Gregory & Satterfield, 2002; Banerjee, Iyer & Kashyap, 2003; Cai, Jo & Pan, 2012; Miller & Sinclair, 2012; Oh, Bae & Kim, 2017; Aqueveque, Rodrigo & Duran, 2018). Sectoral/industry characteristics also greatly influence how other stakeholders see, perceive, evaluate and respond to companies and their sustainability related actions or communications (Céspedes-Lorentea, de Burgos-Jiménez & Alvarez-Gil, 2003; Hutt, 2010). For most of the companies and sectors this process is rather straightforward, as there are plenty of opportunities for establishing communication, for example via regular marketing and advertising activities (Wanderley et al., 2008). However, some sectors have difficulties to establish meaningful communication with stakeholders, as there is no clear producer/supplier – customer dichotomy, thus no clear lines of communication. This is further complicated if the communication is about a topic that comes outside of the business core domain, such as sustainability (Morsing, 2017; Else, Choudhary & Genovese, 2022). Corporate avenues for sustainability communication, such as sustainability or ESG reports, websites or social media, are, for various reasons, usually inefficient (Sones, Grantham & Vieira, 2009; van Duuren et al., 2016; Barkemeyer et al., 2020; Bose, 2020; Pizzi et al., 2021; Linder et al., 2023). When a sector affiliation of the company represents an extreme case, suffocating regular avenues of sustainability communication, this emphasizes to importance of other actors, or people and organizations who can assume the duty to evaluate, interpret and resonate the corporate sustainability actions, projects and strategies.

This research exploits such as setting as it is determined to examine how the general public perceives and understands the corporate sustainability of the pharmaceutical sector, focusing on the role of social evaluators, social influencers and the media. It is designed in a way to address three main specific gaps or problems: 1) The overall knowledge and analysis of the pharmaceutical sector, both in general and especially regarding sustainability, is underdeveloped (Scherer, 1993; Veleva et al., 2003; O'Riordan & Fairbrass, 2008; Fischer, 2009; Goldacre, 2012; Kessel, 2014; Belkhir & Elmeligi, 2018; Iqbal & Keay, 2019; Malmqvist et al., 2023). Because of its sectoral characteristics, researchers tend to avoid the examination of the pharmaceutical industry, which leaves for a significant gap in our understanding of a particularly important industry; 2) The concepts of social influence and the potential roles of social influencers have been studied extensively by business and organizational scholars, mostly focusing on marketing and advertising potentials and possibilities (Goldsmith & Goldsmith, 2011; Bond et al., 2012; Abrahamse & Steg, 2013; Young et al., 2017), but rarely addressing the corporate sustainability side of it. Much could be gained by exploring how social evaluation, the concept of social influence and actions of social influencers change the communication and overall dynamics between companies and their stakeholders related to corporate sustainability; 3) It is generally accepted that the media assume the role of social evaluators and social influencers on different important topics, directing and influencing public opinion, but there is a gap in research on the role of the media in the agenda-setting and framing of sustainability issues regarding sustainability in the pharmaceutical sector. This research is determined to explore the dominant sustainability themes in the media, and the different tools used in the process of articulating and shaping those themes and overall evaluations.

The research explores two different but closely connected avenues: 1) Multi-stakeholder sustainability projects, in which pharmaceutical companies count on members of the community to act as social evaluators and influencers, pushing for project implementation and thus spreading the company's sustainability message in their communities (Goldsmith & Goldsmith, 2011; Bond et al., 2012; Abrahamse & Steg, 2013; Ruben & Gigliotti, 2016; Young et al., 2017); 2) The media representation of corporate sustainability in the pharmaceutical sector, as in the specific context the role of the media to act as social interpreters and evaluators comes to full prominence and critically dominates the process of forming the general public opinion on sustainability (McCombs & Shaw, 1972; McQuail, 1985; Entman, 1993; Hajer, 1993; Deephouse, 2000; Norris, 2000; Hajer & Versteeg, 2005; Boykoff & Boykoff, 2007; Lang & Lang, 2009; Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017; Osmundsen & Olsen, 2017; Barkemeyer, Givry & Figge, 2018; Roulet & Clemente, 2018; Barkemeyer et al., 2020; Griffith Oliver et al., 2023).

The research identifies three broad research gaps or objectives in the existing literature and thus proposes a set of eleven more specific possible research questions. First, realising that sustainability literature allows the opportunity to expand the knowledge about the meanings and perceptions of corporate sustainability, especially in the sector/industry specific context, this research asks: 1) What is the overall perception and evaluation of sustainability in the pharmaceutical sector? 2) How do pharmaceutical companies communicate their sustainability to their stakeholders, what are the possible avenues of communication and cooperation and what are the factors that influence this communication? 3) What are the most important or relevant themes that characterize corporate sustainability of the pharmaceutical sector in the eyes of their evaluators, stakeholders, and the general public? Second, focusing on the gaps in the literature on social influence theory, especially in the context of corporate sustainability (as social influence literature in business context overwhelmingly deals with marketing and advertising), this research proposes the following questions: 4) How can social influence approach be utilized in the multi-stakeholder sustainability projects in the pharmaceutical sector? 5) Who are the most valuable partners in such projects and which social influencer roles (or approaches) can they take up? 6) What are the conditions and factors that can affect social influencers and their success in their sustainability multi-stakeholder project activities? Third, the intersection of the media framing, sustainability and pharmaceutical industry literatures allow for more detailed analysis of sectoral specificities regarding corporate sustainability, as the literature on sustainability in the pharmaceutical sector is rather scarce and is focused on either analysis of the corporate materials (focusing on sustainability commitments and corporate strategies) or the strict empirical analysis of the companies' performance. Thus, this research asks: 7) How the mainstream media frame corporate sustainability in the pharmaceutical sector? 8) What is the relationship of the media evaluation of the corporate sustainability in the pharmaceutical sector with the specific sector/industry characteristics and with the societal expectations from the industry? Finaly, having in mind that storyline literature is still very much conceptual and that, related to sustainability, so far it focused on how specific actors (or social groups) framed and pushed for their dominant storylines (for example, the industry, the scientific community or the policy-makers), this research pursues the following questions: 9) Who has the possibility and the agency to shape dominant storylines that would reconcile or at least bring closer together the confronted dominant sustainability discourses of businesses and their stakeholders? 10) What are the dominant media storylines regarding corporate sustainability in the pharmaceutical sector? 11) What types of journalistic norms, literary tools and communicational devices are used in the process?

The thesis is structured as follows. The *Introduction* (Chapter 1) is followed by *Literature review* (Chapter 2), in which the notions of sustainability, corporate sustainability and corporate social responsibility, the stakeholder perspective on business, the multi-stakeholder sustainability projects and the role of social evaluators and social influencers in them, the role of mass media in shaping the public opinion and common knowledge and their agenda-setting, framing and storyline-building are being analysed. This is followed by *Research setting and context* (Chapter 3), where the overall and sustainability-related characteristics of the pharmaceutical sector have been outlined. *Methodology* (Chapter 4) follows, focusing on ontological and epistemological considerations, issues of data selection and methodological approach to analysis. Three separate studies follow, structured similarly to individual academic papers (with their own theoretical considerations, methodology sections, findings and discussions) – *Why do multiple-stakeholder sustainability projects fail? The case of 'The Complete the Cycle' programme (2011-2020) and examination of the social influencer engagement approach* (Chapter 5), *Media framing of sustainability: The case of British pharmaceutical companies (2000-2020)* (Chapter 6) and *Media Representations of Sustainability in the Pharmaceutical Industry: A Storylines Perspective* (Chapter 7). This is followed by the general *Discussion* section (Chapter 8) and the research is concluded with the *Conclusion* section (Chapter 9), focusing on contributions, limitations and possible avenues for further research.

2. Chapter 2 – Literature review

2.1 Introduction

In this chapter, the most important theoretical concepts relevant to the research will be analysed, with consideration of the main theories divided into different sub-sections. The literature review starts with the analysis of the concept of sustainability and its multicomplexity; it is followed by an explanation of the difference between the concepts of sustainability, corporate sustainability (CS) and corporate social responsibility (CSR), as well as the stakeholder perspective of the firm; the following sub-section is dedicated to the theories of social influence and social communication, seen as a possible pathway for the establishment of meaningful communication between companies and their stakeholders; it is followed by the detailed analysis of the characteristics, societal roles and the importance of mass media in modern societies, as well as their role in establishing connections between companies and their stakeholders; next are the sub-sections dedicated to specific roles the mass media fulfil – their agenda-setting, framing and storyline-building; and finally, the chapter is concluded with the identification of the gaps in the literature in the adequate research context and setting and laying out the overall research questions and research design.

2.2 The complex concept of sustainability

2.2.1 Dimensions of sustainability and the rise of sustainable development

Sustainability is one of the most important issues of the modern world and it entails a range of ‘grand challenges’ (George et al., 2016b) humanity faces today. Sustainability grounds the human development debate in a global framework, within which a continuous fulfilment of human needs constitutes the ultimate goal: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 16). This famous quote, despite its ambiguity and lack of clarity, is today the universally accepted definition of sustainability. However, sustainability is a field that can be characterized as being highly complex and inevitably shrouded by uncertainty (Newig et al, 2013). Thus, it is semantically, theoretically, and practically ambiguous and different people and organizations understand it in different ways. Rather than a well-defined concept, it can better be characterized as a contested discursive field which allows for the competing cacophony of well and not-so-well articulated environmental, political, and economic differences (Becker, Jahn & Stiess, 1999). Even the generally universally accepted definition of the sustainable development from Brundtland report was questioned and sometimes labelled as an ideological expression representation of ‘green imperialism’ (Bergesen, 1988).

Whether it is seen as a concept that is not problematic in principle but hard to achieve in practice (Agyeman & Tuxworth, 1996), or as a concept that is understood as the one that reconciles the concepts of economic growth and the limitation of the resource base (Elliott, 1999), or as a concept that is analytically not very useful because it is too vague, one should acknowledge that discovering the definite meaning of ‘sustainability’ and ‘sustainable development’ should not be the priority. Furthermore, one should focus on understanding that there are many different ‘sustainabilities’, that they are negotiated and shaped by societal actors and used in political discourse (Haughton & Counsell, 2004). Thus, this conceptual ambiguity and ensuing contestation is inevitable, explicable and perhaps even desirable (Connelly, 2007).

Since the emergence of universally widespread and global concerns over environmental damage to the planet in the 1960s and 1970s (Ader, 1995; Basiago, 1995), and the subsequent social mobilization and the rise of political willingness to fight it (Rome, 2003; Dietz, 2020), considerable effort has been put both into conceptual development and practical application of sustainability. Institutionalization of the environmental struggle and almost universal acceptance that environmental issues and problems are one of the most important focal points of actual and future global political and governance actions (as modern environmental politics is guided by a strong sense of purpose, arising from pressing concerns about how to prevent the rampant destruction of nature and the self-destruction of humanity) (Torgerson, 2000), lead to the necessity of better understanding and conceptualizing the otherwise vague notion. A multiplicity of important and interesting questions arise from that necessity. How can sustainability be defined and measured? Who should be concerned and whose responsibility it is to push towards sustainable transformation? What policies and institutions can be implemented or supported in order to achieve it (Paehlke, 1999)?

Sustainability is a broad multi-focal concept, and terms such as ‘triple bottom line’ and ‘sustainable development’ are being used interchangeably, sometimes as synonyms and, as a result, sustainability carries many implications and nuances, so in order for it to be properly understood, it is almost necessary to be defined whenever it is used, either by researchers or by policy makers (McKenzie, 2004). As economic and social aspects of sustainability have been adopted as additional and interrelated concerns to environmental ones, sustainability often represents something even bigger and greater, a sort of philosophy or methodology for evaluating if human actions and behaviour will provide for long-term vitality, in which principles of futurity, precaution, equity, global environmentalism and biodiversity guide both evaluation and decision-making (Basiago, 1995). Sustainability is very often understood and perceived intuitively but expressing it in concrete and operational terms remains a challenge (Briassoulis, 2001; Labuschagne, Brent & van Erck, 2005).

Contemplation and concern about sustainability, of course, have their roots in the concern for global environmental deterioration, as environmental conditions have significantly worsened in many places and on a global level, and the integrity of life support systems have come under increasing threat (Swart, Raskin & Robinson, 2004). Because of the ongoing and ever deteriorating environmental crisis, unfolding since the dawn of the industrial society, a crisis that is most visible in events such as climate change, global warming, pollution, or loss of biodiversity (Hoekstra & Wiedmann, 2014), the main association with sustainability is ecological and biological, focusing on both natural resource usage and negative externalities and their impact on both humans and their natural surroundings (Robinson, 2004). As human activities, especially the rapid economic and technological development, increase in both volume and intensity, the natural boundaries for safe living and operating have been reached and surpassed (Scheffer et al., 2001; Lenton et al., 2008). Thus, as an idea that is supposed to oppose the trend, sustainability is a perceived way in which humans and their organizations interact and should interact with the natural environment and natural systems (Robinson & Tinker, 1998).

Many biologists and ecologists believe that the preservation of the natural capital (of which some is renewable and infinite, and some is non-renewable and finite) is necessary to maintain the vitality and even to achieve the survival of humans and their organizations (Basiago, 1995; Goodland, 1995). This includes the management of biological and genetic diversity (biosphere), but also complex systems that make our natural surroundings (atmosphere, hydrosphere, lithosphere, etc.) (Goodland, 1995). This ‘strong sustainability’ perspective assumes that the stable and sustainable societies should cause minimal disruption to these systems and practice maximum conservation (Ott, 2003; Bonnedahl & Heikkurinen, 2018). The natural capacities are limited (both the source and sink capacities) and natural capital cannot be completely replaced by human capital (Goodland, 1995; Wilkinson, Hill & Gollan, 2001; Robinson, 2004). Thus, maintaining current practices and the developmental paradigm (living off the inherited and finite natural capital, not accounting for the losses in the natural capital and downplaying the environmental damage) is causing the rapid deterioration of the environment and diminishes our prospect of survival (Goodland, 1995; Wilkinson, Hill & Gollan, 2001). The environmental restrictions have become a major obstacle on human progress and even endanger the human existence in the future (Goodland, 1995). Thus, the maintenance of natural systems is a prerequisite for any consideration of social sustainability.

‘Strong sustainability’, or the notion that the further economic development inevitably leads to the deterioration of the natural environment to the point of collapse, have prompted the emergence of various socio-economic arrangements and models that completely emphasise and prioritise the conservation of the environment, to the point of the willingness to accept the necessity to stop economic development, such as the theory of degrowth (Robra & Heikkurinen, 2021). On the contrary, ‘sustainable development’, as understood by almost all the relevant actors, emphasizes the necessity to integrate three important sustainable ‘imperatives’: the ecological imperative (staying within the boundaries of biophysical carrying capacity), the social imperative (providing systems of governance that support and develop the values that people want to live by), and the economic imperative (providing an adequate material standard of living for all) (Robinson & Tinker, 1998; Swart, Raskin & Robinson, 2004). However, as sustainable development is complex and often ambivalent, it also involves conflicts of interests as well as conflicts of values. Various societal actors try to impose their values, understandings, and resources in the process of framing what sustainability and sustainable development are (Kates, Parris & Leiserowitz, 2005; Lindenfeld et al., 2012; Newig et al., 2013). This then raises interesting questions about the issues such as the environmental justice and the inclusion and the integration of different social, economic, and cultural dimensions and perspectives in the debate (important theoretical and contextual lenses such as class, race, gender, colonial or postcolonial status, or material well-being) (Taylor, 2000; Agyeman, 2007). For more detailed insight into these interesting dimensions, see Becker and Jahn (1999).

Despite originating in the environmental discourse, the very ideas of sustainability (and especially sustainable development) are inevitably related to different types of societal expectations. Many academics argued that sustainability is pointless without the analysis of what does it mean for humans and that it should not focus on sustaining a certain environment as a ‘state of nature’ as such, detached from the people, but should examine environmental conditions according to the opportunities they offer to people (Voget-Kleschin, 2013). As sustainability could then be seen as reaching and implementing a wide societal consensus about what should be sustained, the sustainability debate naturally shifted towards the analysis of what societal needs and desires are.

The shift of perspective towards fulfilling human needs and the improvement of the quality of human life on a global level represents the foundation of the concept of social sustainability. It prioritises the qualitative over the quantitative dimension and shifts priority for development towards the improvements in the human well-being (in the areas such as the reduction of poverty, illiteracy, hunger, disease, and inequity). Instead of an uncompromised approach to the preservation of the natural capital and the ruthless multiplication of financial capital, the very idea of social sustainability is focused on the development of the human and the socio-organizational capital: labour, health, skills, knowledge, education, motivation, culture, habits, norms, roles, traditions, regulations, and policies (Gilman, 1994; Basiago, 1995), with the full understanding of the need to establish an equilibrium between them, however volatile this equilibrium might be.

Debates about important societal issues such as sustainability, whether they are philosophical, academic or practical, tend to overspill to political and policy-related arenas. The substantial pressure related to environmental issues felt by national governments since the 1970s and 1980s was elevated to the global governance arena, with the idea to tackle the sustainability issues on the long-term basis, via collaborative efforts within the UN. As the need for more sustainable modes of production and consumption was generally accepted by almost all societal actors, and the need for systemic responses to global societal challenges as well, sustainability has become a part of major normative global policy agendas. The most important one today is the UN Sustainable Development Goals (SDGs) agenda, which started in 2000 as an explorative Millenium Development Goals (MDG) programme but evolved to a more complex framework after initial encouraging results (Loewe, 2012; Sachs, 2012; Fukuda-Parr, 2016; Vandemoortele, 2017). The UN SDGs in particular represent a prominent and well-stablished normative and practical framework for balancing economic, social, and environmental development and the inclusion of all stakeholders' perceptions and needs into long-term global developmental strategies (Sachs, 2012; Fonseca et al., 2020).

2.2.2 Corporate sustainability and corporate social responsibility

When this idea of meeting the needs of the present without compromising the ability of the future generations to meet their own needs is transported to the business arena, corporate sustainability (CS) can accordingly be defined as a meeting the needs of a firm's direct and indirect stakeholders (such as the shareholders, employees, clients, pressure groups, communities, etc.), without compromising its ability to meet the needs of the future stakeholders as well (Dyllick & Hockerts, 2002). Corporate sustainability integrates economic, ecological, and social aspects into a so-called 'triple-bottom line' (Elkington, 1997). As all three dimensions of the 'triple-bottom-line' are inter-related, they affect and influence each other in different and very complex ways. At this point, the concept of sustainability clashes with mainstream management theory (Friedman, 1970; Arrow, 1973), as it suggests that economic sustainability alone is not sufficient for the overall sustainability of a company (Gladwin, Kennelly & Krause, 1995). A singleminded focus on economic sustainability can be successful in the short run, but in the end, sustainability requires all three dimensions to be satisfied simultaneously. Furthermore, not responding to sustainability concerns and challenges negatively reflects on the competitiveness and survival of business organizations, as companies that do not respond adequately to emerging megatrends generally fail (Lubin & Esty, 2010).

Subsequently, paying attention to sustainability and inclusion of sustainability issues, policies and practices into corporate strategy represent a shift from short-term corporate survival and sole focus on financial profits to long-term business success and returns. This shift involves changes in corporate structures, operations, priorities, and values (Clark, 2001; Wilkinson, Hill & Gollan, 2001). Thus, corporate sustainability (CS) refers to a company's activities that demonstrate the inclusion of social and environmental concerns in business operations and in interactions with their stakeholders (van Marrewijk, 2003).

Conceptualization of the corporate sustainability in more strategic and operational terms leads to the notion of corporate social responsibility (CSR). Recently, CSR has become one of the central issues on the agenda of business organizations but is still in many ways far away from being a focal point in the corporate strategy (Velte, 2022). CSR is grounded in legitimacy theory, which assumes that every business organization has an implicit social contract with the society in which it operates (Burlea Şchiopoiu & Popa, 2013). The existence of this implicit social contract forces managers to comply with a society's specific values, norms and boundaries. Thus, the long-term success and survival of the company depends on its ability to systematically meet society's expectations, and gain the corporate citizenship (Waddock, 2008; Sharp & Zaidman, 2010). If, as a result of corporate behaviour, the corporate legitimacy is compromised and corporate citizenship is endangered, business organizations will adopt and operationalise strategies that lead to re-legitimization (Fernando & Lawrence, 2014).

In this context, where the role of business in society is emphasized, well-governed companies will seek to differentiate themselves through engagement in CSR (Yuan, Bao & Verbeke, 2011). More generally, CSR can be described as a set of management practices that help the company to maximize the positive impacts of its operations on society (Jamali & Mirshak, 2007). Transformative as it may seem, the core of the CSR discourse is still conformist and embedded in the ruling social and economic system that prioritises the capital and private initiative and governance (Öberseder, Schlegelmilch & Murphy, 2013). The prevailing idea is that the private sector is the dominant engine of growth, creating the value and providing the managerial resources and that it has an obligation to contribute to economic growth and opportunity that is equitable and sustainable. Thus, CSR assumes that companies should transition from a state of mere compliance to a mode of engagement and from harm mitigation to value creation (Pomering & Dolnicar, 2009).

Apart from normative justifications of CSR based in the legitimacy theory and the stakeholder perspective, a powerful justification for firms engaging in CSR initiatives comes from the concept that sustainably successful CSR initiatives eventually must be rewarded in the market by consumers, through their purchase behaviour, and that the companies that fail to implement CSR strategies are going to be punished (Hansen & Schrader, 1997; Orlitzky, Schmidt & Rynes, 2003; Pomering & Dolnicar, 2009). Research on CSR seems to support this assumption – companies that align their social goals with their corporate goals and companies that use CSR as a strategic tool to maximize firm value, have greater potential to increase shareholder value as well as the value for other stakeholders (Malik, 2015). Genuine and sincere engagement in CSR can also improve corporate reputation and mitigate the negative effects of lack of trust and bad image (when consumers attribute sincere motives, but CSR is ineffective when sincerity of motives are ambiguous, and even hurt the company's image when motives are perceived as insincere) (Yoon, Gürhan-Canli & Schwarz, 2006). In fact, many researchers believe that within the CSR context, successful CSR strategies enhance both reputation and competitiveness, even to a synergic positive effect (Vilanova, Lozano & Arenas, 2009). This implies that companies should not only be actively engaged in CSR, but that communicating and providing truthful information about CSR should be considered as an integral part of the CSR strategy (Öberseder, Schlegelmilch & Gruber, 2011; Ali, Frynas & Mahmood, 2017).

Finally, one of the concepts that emerged recently to add to the confusion about the sustainability terminology, both in corporate and academic sectors, is the idea of ESG (Environmental, Social and Governance) standards. Very often there is an overlap between CSR and ESG, and sometimes they are being used as synonyms. Even though the two concepts have similarities and are very much related, each has its own distinctive characteristics (Gillan, Koch & Starks, 2021). Used as management tools, they both aim to introduce a set of policies and practices that have an overall positive impact on the planet and societies. To put it briefly, CSR is related to company's framework of sustainability plans and responsible cultural influence, and, on the other hand, ESG is the assessable outcome concerning a company's overall sustainability performance. In practical terms, CSR is a general sustainability framework at the firm level, while ESG is a measurable sustainability assessment, mostly used for disclosure (Kaźmierczak, 2022). Thus, ESG as a concept and as a set of standards, tools and practices, is much more suitable for corporate outreach and communication with corporate stakeholders (Gigauri & Vasilev, 2023; Kandpal et al., 2024).

2.2.3 Stakeholder perspective

The analysis of corporations as social institutions, with voluntary responsibilities that go beyond their shareholders, led to the fact that the broad network of internal and external relationships had to be recognized and facilitated in the process of the organizational pursuit of their purpose and mission (Hutt, 2010). Business organizations do not exist in isolation; they instead rely on numerous relationships established with different parties or stakeholders. Stakeholder theory focuses on questions whether and why companies attend to the interests of the stakeholders along with their own immediate corporate interests (Freeman, 1984; Mitchell, Agle & Wood, 1997). Stakeholders are identified as "… groups and individuals that have a valid interest in the activities and outcomes of a firm and on whom the firm relies on to achieve its objectives" (Freeman, Harrison & Zyglidopoulos, 2018, p. 1).

The normative stakeholder view of the companies focuses not on the maximization of shareholder wealth but rather on optimization of the sustainable economic and other benefits of all stakeholders (Donaldson & Preston, 1995; Kim & Nofsinger, 2007). Stakeholders have the power to impose their influence either by supporting or by denying support to initiatives crucial to the survival, competitiveness, and profitability of the company (Donaldson & Lorsch, 1983; Mitchell, Agle & Wood, 1997) and their roles are not static, and the same people or groups can assume different roles at different times, depending on circumstances (Hutt, 2010). Subsequently, it should not be taken for granted that all of those within one category are homogenous in their views (Crane & Livesey, 2003). Stakeholder theory presupposes that interaction and engagement between stakeholders is crucial. Stakeholder engagement is made of formal and informal ways of staying connected to the parties who have an actual or potential interest in or effect on the business (Hutt, 2010). The ability of organizations to create and sustain effective stakeholder relationships (information sharing, consultation, communication, etc.) is an important asset, because these are context-specific, dynamic, and difficult to copy (Filieri et al., 2014; Reypens, Lievens & Blazevic, 2016; Schnackenberg & Tomlinson, 2016; Lehtinen, Aaltonen & Rajala, 2019). In order to meet the expectations of all relevant stakeholders, companies need to maintain and grow their economic, social, and environmental capital base while actively contributing to sustainability in the political domain and actively playing their part in collaboration with other stakeholders to initiate and maintain policies and practices to support sustainability (Wilkinson, Hill & Gollan, 2001).

However, of course, there is a catch. As Peter Marcuse (1998, p. 104) beautifully wrote: “Sustainability is both an honourable goal for carefully defined purposes and a camouflaged trap for the well-intentioned unwary.” The argument is that, as a concept and a slogan, sustainability has an honourable pedigree in the environmental movement, and the fight to have the standards of sustainability generally accepted by all sides, at least in principle, was successful, although, in practice, severe conflicts of interest still exist, as different stakeholders still have different priorities (Robinson, 2004; Redclift, 2005). The rapid growth of business organisations has significantly improved many aspects of human life over the last three hundred years, but businesses have also been responsible for causing many of the problems humanity faces today. As stated before, there is a wealth of previous research that focuses on the threats to and the potential and possible collapse of the planet’s natural environment and existing ecological systems, including climate change, resource depletion and nature degradation, pollution and unwanted externalities, loss of biodiversity and unrepairable damages to life-supporting ecosystems (Basiago, 1995; Goodland, 1995; Wilkinson, Hill & Gollan, 2001). Scholarship has also stressed the negative impacts of business on various social issues, such as uneven development, food insecurity, global inequality, and rising poverty (Russell, Padfield & Bretter, 2023). On the other hand, the prevailing global social and economic constitution implies that any serious attempt to achieve a sustainable transformation will have to include the business sphere as well.

In this sense, it is important to distinguish sustainability in general from the corporate perspective and understand that sustainability and corporate sustainability are not synonyms (Moon, 2007). The concepts of corporate sustainability and corporate social responsibility are still evolving, but it is accepted that they are entailing the economic, legal, ethical, and philanthropic responsibilities the businesses have towards their stakeholders (Carroll, 1979). Economic responsibility requires that a business should be profitable and produce the goods and services that are desirable in a society. Legal responsibility is meeting the society's expectations as established by the law. Ethical responsibilities require that the companies follow the modes of conduct considered to be morally right. Philanthropic responsibilities reflect the common desire to see the businesses actively involved in the betterment of the society beyond their economic, legal, and ethical responsibilities (Lee & Carroll, 2011). Thus, the corporate sustainability paradigm shifts the sustainability discourse towards business, making it not just a partner in contemplating, designing, and implementing the sustainability related strategies and policies, but also promoting it to its most important actor and agency-holder (Dyllick & Hockerts, 2002).

When it comes to corporate sustainability, companies' stakeholders have become an important partner in the process of corporate governance, most notably via the approach that treats stakeholders as 'conscientious consumers', who can influence the corporate fortunes or misfortunes with their purchasing decisions, punishing or rewarding the corporate sustainability behaviour (Vogel, 2005; 2010; Bartley, 2014; Heikkurinen et al., 2019; Lu et al., 2023). However, as not all the stakeholders are buyers of corporate goods and services, as well as considering the fact that not all customers are in the position to exert the power to punish or reward a company 'with their wallets', other means of stakeholder engagement are crucial for corporate sustainability transition, as stakeholder interaction plays a multifaceted and reciprocal role in regard to sustainable value propositions, creation and capture (Fobbe & Hilletofth, 2021). What is in common with all the means of stakeholder engagement and interaction is that they presume that the stakeholders will have certain expectations from companies (Silva, Nuzum & Schaltegger, 2019), thus that the stakeholders act as important evaluators of companies, especially their sustainability performance and strategies (Ayers, 1987; Perrini & Tencati, 2006; Bryson, Patton & Bowman, 2011; Skilton & Purdy, 2017).

2.3 Social influence and social communication

It is firmly established by now that the business sector has become an integral part of the global shift towards sustainable transformation (Miklian, 2019; Fet & Keitsch, 2023; Fischer et al., 2023). As businesses tend to engage in more sustainable behaviour, either because of intrinsic or instrumental reasons, their need to establish meaningful connections and communication with their stakeholders becomes a priority (Moser, 2010; Adomßent & Godemann, 2011; Crane & Glozer, 2016). Companies acknowledge their necessity to communicate with stakeholders, either to inform them of their sustainability related policies, strategies, and projects, or to gain valuable feedback from the stakeholders regarding their ideas, understandings, priorities and demands. Even if the company engages in the process of sustainable transformation for purely instrumental reasons (and as hardly anyone is openly against sustainability, and the companies that are not sincere in their intentions and are only engaged in greenwashing, typically do this by symbolically subscribing to sustainability while pursuing hidden non-sustainable agendas), most societal actors share a normative orientation towards changing potentially harmful human actions in order to protect nature and precious social and economic institutions (Brulle, 2010; Newig et al., 2023).

Behavioural change to achieve sustainable transformation thus requires the change of behaviour of all the societal actors. In the case of particular business organizations, both the companies and all their stakeholders need to change their behavioural patterns. Of course, in accordance with the ‘polluter pays’ principle, the bulk of the work and the transformation initiative lies in the hands of the companies, as they are the ones who are using natural resources for their profit and produce externalities (pollution) (Schwartz, 2010; Ambec & Ehlers, 2016). This is especially true for companies in the field of healthcare, as the gap in the capacities, knowledge, and the motivation for sustainable transformation between the companies and other stakeholders (especially patients and medical professionals) is particularly large (MacNeill et al., 2020; Malmqvist et al., 2023). The moral (companies are seen as the ones that pollute) and capacity-related (companies have better access to knowledge and resources) disproportions between the companies and their stakeholders force the companies to take the initiative in sustainable transformation. If the businesses are set to be in the front line and if they are the ones expected to take the initiative towards sustainable transformation, to encourage people to change their behaviours to protect and improve the environment, it requires the input and cooperation of all segments of society (Goldsmith & Goldsmith, 2011).

One of the ways to better understand how companies might attract their stakeholders to their sphere of influence and encourage them to engage in environmentally friendlier behaviour, as well as to better communicate their sustainability policies, strategies, agendas, and projects, is social influence theory (Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013). Social and behavioural sciences have been dealing with the issue of how to influence someone’s behaviour for a long time, and generally it has been determined that it is done either by punishment, reward, persuasion, or personal influence (or the combination of all of these) (Cialdini & Goldstein, 2004; Falk & Scholz, 2018). As companies are somewhat limited in their possibility to utilise some of the existing behaviour change strategies (they can, of course, offer reward if a stakeholder changes its behaviour, but their potential to punish is naturally restrained), and because of the fact that companies are rather limited in establishing direct contact with stakeholders, either by their nature or by their fear of being involved in some kind of damaging controversy (for example, in the pharmaceutical sector, companies are usually forbidden to advertise their products and any sort or marketing activity can be seen as either illegal or as highly unethical), the business sector is evermore relying on the influence of other people or organizations to spread their messages or intentions (Goldsmith & Goldsmith, 2011; Bond et al., 2012; Abrahamse & Steg, 2013; Young et al., 2017). Social influence can reshape the human behaviour in very powerful ways, clandestinely and even unconsciously utilising all the prementioned tactics (punishment, reward, persuasion and even education) (Goldsmith, 2015).

Being biological and social entities at the same time, and understanding that in order to live, fit in the society and thrive they need to establish reciprocal, meaningful and fulfilling connections with others, humans tend to adjust their thinking and behaviour to the attitudes and behaviour of others (Turner, 1991; Davis et al., 2015). The desire to conform is very strong, people are concerned what others think of them and how that affects their social reputation. Thus, the behaviour that is considered positive, appreciated and valued, tends to be imitated and, subsequently, institutionalized as desirable, either formally (as a part of educational system, for example) or informally, as interactions within social groups. In these interactions within social groups, people share information, and the value of each piece of information and the reputation of those who share information, leads to the internalization of that particular information, which then becomes the basis and the foundation for further thoughts, feelings and actions (Goldsmith & Goldsmith, 2011). The social transmission of information, but also values, directives and behavioural patterns, thus becomes a powerful force of social communication and even social leadership (Bond et al., 2012; Ruben & Gigliotti, 2016).

Social communication can vary in its form, and it can be both scripted and non-scripted, formal and informal, organized and spontaneous, and it can use but does not require media outlets (Goldsmith & Goldsmith, 2011).

According to Abrahamse and Steg (2013), different social influence approaches vary in their effectiveness related to sustainable change in consumption behaviour, but the most effective ones seem to be the ones engaging face-to-face interaction between the 'influencers' or 'opinion leaders' and the ones whose behaviour is to be affected (Goldsmith & Goldsmith, 2011). In their proposed typology (Abrahamse & Steg, 2013), most effective social influence approaches were: 1) 'Block leaders and social networks', where, for example, people who recycle encouraged their friends and neighbours to do the same. This observation is grounded in the idea that people are more likely to take action if the information is given by someone who belongs in their social network. The stronger the ties in the network are, the more likely the information will have an effect on changing the behaviour. 2) 'Public commitment making', where, for example, members of the community or social circle sign a community pledge to conserve water. The idea to publicly bind someone to change their behaviour has been linked to the need for consistency and maintenance of social pressure, in order to adhere to the given commitment. 3) 'Modelling', for example, someone showing their neighbours how to separate trash or compost. People are more likely to commit to a certain behaviour if they see others engaging in it.

The social influence approach highlights the idea that for someone or something (an individual or an organization) to affect the behaviour of others and drive them towards, say, a more sustainable lifestyle, it is necessary to establish efficient means of social communication, in order for this message of sustainable transformation to be transmitted. The individuals and organizations that do not have the prospect to do so, ought to rely on those individuals and organizations that do – 'social influencers' or ‘opinion leaders’ (Goldsmith & Goldsmith, 2011; Ruben & Gigliotti, 2016). Interpersonal and face-to-face communication is the most efficient way to do it, but recent studies have shown that other means of communication can also be effective under certain circumstances (for example, if the customers have a high level of trust in a company), such as social communication via social media and other types of media outlets (Bond et al., 2012), but not to the same extent of efficacy (Young et al., 2017). However, the interpersonal approach to affecting changes in behaviour seem to pose many challenges to big organizations such as businesses, especially in certain business sectors. There are limitations to their ability to mobilize, incentivize and support social influencers to share their message. This research, among other things, explores these limitations. Thus, the social influence remains one of the important ways to promote more sustainable behaviour, but it is complementary with the other means of social influence, such as trustworthy mainstream media outlets. Mainstream media could also be seen as ‘social influencers’ and their social roles are briefly explained in the following sub-chapter.

2.4 Media as social evaluators and influencers

2.4.1 Mass media – their societal role and significance

The rise of literacy, the mass media and the technology that enables people to access them, are important historical prerequisites for the emergence of the modern society. It is difficult to imagine modern people navigating through life and making important choices without being properly informed. As the bounds of the individual perception and experience are limited, most of the things that people know come to them second or third hand (Wilson, 1983; Fricker, 2006), thus the mass media and how they understand, process, and transmit events are crucial for the functioning of every society (McCombs & Shaw, 1972). In modern representative democracies, the media are assigned with different tasks: to act as a forum, allowing the stakeholders to communicate and exchange ideas; to act as a mobilizing agent, encouraging stakeholders to act; and to act as a watchdog, enforcing an oversight and a democratic control over the social processes (Norris, 2000; Barkemeyer, Givry & Figge, 2018).

The media shape social and political realities by way of first-level agenda-setting mechanisms, which determine salience and frequency of certain topics, issues, or actors in the media (McCombs & Shaw, 1972; Fiske & Taylor, 2008), and then progressing to the second-level agenda setting or framing, shaping the discourses around those topics, issues, and actors. They force the attention to certain issues, and they build public images (Lang & Lang, 2009). The media can also be described as social control agents, the entities that have the institutional role of interpreting the legal, ethical, and socially responsible behaviours and assess whether the individuals or organizations crossed over such lines (Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017). Thus, the traditional media essentially create something that would best be described as ‘common knowledge’ about the general and specific topics (Roulet & Clemente, 2018). When it comes to the companies, the media record the public knowledge and opinions about them and also influence the public knowledge and opinions about them (Deephouse, 2000).

As the mass media play a powerful role in the shaping of the public opinion, all the stakeholders involved with the media have potentially a lot to gain or to lose (McQuail, 1985). When it comes to the business organizations, the positive emotional responses from the general public can be beneficial for the companies and can provide the firms with access to critical resources (human capital, markets) and strategic opportunities (Rindova, Pollock & Hayward, 2006). On the other hand, negative responses lead to stakeholder pressure. As general public perceptions turn into general awareness and concern, the meaningful responses, organizations and actions are more likely to emerge.

The media landscape has been going through major transformations since the late 1990s, mostly driven by changes in technology. The rising influence of social media outlets, the crisis of the mainstream media business models and emergence of modern technologies that change how people consume and process information, pose a major threat to the traditional media, both to their financial viability and their role of undisputed social evaluator. Overwhelmed by the abundance of information and half-information, in a development that has disrupted the long-existing paradigm of quality of information depending on information demand, the average person would increasingly come to question the authority and importance of the mass media interpretation of reality (Davenport & Beck, 2001; Ciampaglia, Flammini & Menczer, 2015).

However, the mainstream mass media proved to be more resilient than many expected, and remain important, if not crucial, in the process of establishing and maintaining the prevailing societal discourses (Djerf-Pierre & Shehata, 2017; Naser, 2020), especially acting as inter-media agenda-setters (Golan, 2006). Information provided by mainstream media remain the main source of social media debates and engagement, providing the vast majority of news links that are shared and debated online. Mass media continue to set agendas and discussions and manage to be the main actors to shape conversations around major news stories, even if they do not publish information or commentary first. Journalists and pundits associated with mass media tend to acquire new authority and influence through their expert use of social media. This is something that allows mainstream mass media to gain and strengthen influence around the world, opening up the possibilities for impact where it was impossible before, since traditional mass media used to be limited in their possibility to reach certain audiences (Newman, 2011; Rauch, 2016). Far from being overrun and made obsolete by new social media and content consumption imposed by them, it could be argued that traditional mass media and new social media converge and, and in a way, supplement each other (Kenix, 2011).

2.4.2 Media agenda-setting and framing

The most important aspects of modern mass media this research deals with are related to framing – power to set the agenda and determine the salience of certain topics, and to two-way communication between the stakeholders (Entman, 1993; Clemente & Gabbioneta, 2017), and storyline-building – a process of shaping the discursive 'logics' or keys in which certain problems or issues should be understood by the general public (Hajer, 1993; Hajer & Versteeg, 2005; Osmundsen & Olsen, 2017).

Entman (1993, p. 52) states that "… to frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described." Generally, frames tend to diagnose, evaluate, and prescribe. They are used to define problems and determine what a causal agent is doing with what costs and benefits, usually measured in terms of common cultural values; to diagnose the causes and identify the forces creating the problem; to make moral judgments and evaluate the causal agents and their effects; and to suggest the course of action, offer and justify the treatments for the problems and predict their likely effects (Gamson, 1992; Entman, 1993). As the media have an incredibly large pool of information available to choose from to process and pass on, the points of view, values, biases and target audiences are of huge importance for media framing and agenda-setting (McCombs & Shaw, 1972).

The framing and agenda-setting determine how salient certain topics and issues are, and the salience is the essential feature of the cognitive differentiation and emotional investment, which subsequently determines the stakeholder perception of the topics and issues (Shrauger, 1967). Most of the people who follow the mass media, and who are not strongly motivated or driven to search for particular information of interest, are just exposed to the content, and they learn about the issues but also perceive how much importance is given to it (McCombs & Shaw, 1972). Learning stands in direct proportion to the emphasis placed on certain topics and issues. Also, the media framing has an important effect on emotions (Kepplinger, Geiss & Siebert, 2012). As the media either pick up the organizational cues or more salient elements of the organizational identity, they mediatize it, reinterpret it and spread it. Media depictions of organizations are essentially dramatized and simplified and will either be vilifying or celebrating (Roulet & Clemente, 2018). Other journalistic norms are also used, such as personalization (when 'big' stories are downplayed to the level of the personal experience), novelty (finding something new to report on), authority-order (when the authoritative opinion is presented in order to settle the controversy) and balance (seeking different opinions and perspectives to simulate objectivity) (Boykoff & Boykoff, 2007).

The mass media are often engaged in even more important social role, as their attention could be understood as a sign of public attention (Downs, 1972; Baumgartner & Jones, 1991; Dearing & Rogers, 1996). The way media present a certain issue or a problem strongly influences how the general public is going to understand it too (Griffith Oliver et al., 2023). Thus, the mass media can assume the role of an agent that facilitates rapprochement between the sides that are in a misunderstanding about something. In contrast to corporate communication, investigations by the mass media are expected to be neutral and un-interventional (Sheng & Lan, 2019). The media will be inclined to portray corporate actions in a more accurate and comprehensive way than the company does it itself (Gentzkow & Shapiro, 2006), and thus the media depict what is known as a community-based view of reality (which is an informed and accepted account of events that is likely to represent a reasonable indicator of the community's opinion and the 'common knowledge' of events) (Stempel, 1991; Cardon, Stevens & Potter, 2011). The establishment and promotion of the community-based view of reality plays an important role in shaping and validating corporate legitimacy (Barkemeyer et al., 2020).

2.4.3 Discourse coalitions and the concept of storylines

This discursive rapprochement leads to discourse coalitions, a theoretical concept introduced by Hajer (1993), that assumes that societal problems are socially constructed and that the very perception whether something is a problem or not depends on the narrative as part of which it is portrayed and where the understanding can be sought through uncovering many individual interpretations of the same complex issue (Hajer, 1995). As different actors have different interests, the narratives they accept and use are obviously different, thus manifesting the existence of different ‘virtual’ realities. When a group of actors share the same or similar view on a social construct, they tend to create a discourse coalition, so they could be better suited to impose their views on reality on others (Hajer, 1993; Alvarado et al., 2021). By discourse, Hajer means the “… an ensemble of ideas, concepts, and categories through which the meaning is given to phenomena” and a coalition is defined as a group of actors who share a social construct (Hajer, 1993, p. 45). The dominant discourse is the one that starts to dominate the way a society conceptualizes the world (Hajer & Versteeg, 2005).

As the development and imposition of new discourses create change in people’s perceptions of problems and potential solutions, the actors try hard to develop clear, consistent, and powerful images that could serve as their building blocks – storylines (Osmundsen & Olsen, 2017). Gamson and Modigliani (1989) present a storyline as a synonym to a frame – a central organising idea that provides meaning to an unfolding strip of events; while others use it to refer to as a fragment of a narrative (Schäfer & O’Neill, 2017). However, Hajer (1993; 2005) talks about storylines as condensed forms of a narrative in which different metaphors, analogies, clichés, and references are used in discussions as ‘tokens’ or ‘symbols’ (Osmundsen & Olsen, 2017). They are the concentrated narratives on social reality through which the elements from many different domains are combined and which provide actors with a set of symbolic references that suggest a common understanding (Hajer, 1995; Else, Choudhary & Genovese, 2022). By using storylines, it is fairly easy to define the problem, propose the solutions and distribute the responsibility and guilt, as well as label the different actors with different characteristics and assuming roles (victims, villains, etc.), and also evaluate their morality and legitimacy. This is consistent with the notion that media coverage is not simply a reflection of its subjects but is also socially constructed (Griffith Oliver et al., 2023). This construct significantly assigns the affective attributes to the covered actors (Kiousis, 2004; Sheng & Lan, 2019).

The main characteristic of storylines is that the overall complexity of reality is reduced so that it could serve as a simplified narrative many actors can align with (Osmundsen & Olsen, 2017). Through the process of creating and maintaining storylines, the actors choose between different economic, social, or moral arguments (Hajer, 1993). The establishment of dominant storylines provides them with political momentum and power (Hajer, 2009; Osmundsen & Olsen, 2017), as the dominant storylines tend to be accepted and taken for granted by the general public. Hence, they have the potential to become institutionalized (Hajer, 1993) and what can be seen as a common sense of the epoch (Else, Choudhary & Genovese, 2022).

Storylines are being created by actors using different tools and mechanisms characteristic for the mediated discourse – metaphors, symbols, clichés and other rhetorical devices, logical devices, and fallacies, as well as different journalistic micro-practices and norms (Hajer, 2009; Osmundsen & Olsen, 2017). As storylines can be described as a descriptive self-consistent unfolding of past and present events, or of plausible future events or pathways (Shepherd et al., 2018; Ciullo et al., 2021), the very process of storyline-building is very much like a process of creation and dissemination of any narrative. In this process, the media rely on standard norms accepted within the journalism profession, like objectivity, fairness, accuracy, and balance (Bennett, 1996), but also utilize different tools applicable and appropriate for the context and for reaching the desired effect (Johnson-Cartee, 2005). Metaphors, symbols, clichés and other rhetorical concepts are used to create the consistent, coherent, and powerful images that provide a common ground between the various discourses (Osmundsen & Olsen, 2017).

The scholarship on communicational devices and rhetorical effects is very vast and it analyses all the imaginable sides of it – linguistic, cognitive, socioeconomic, political, etc. Based in the tradition of psychology and cognitive science, the usage of rhetorical effects had been mostly studied with a focus on the informational and heuristic perspectives, seen as tools for disseminating and understanding different types of knowledge (Skorczynska & Deignan, 2006). The social side of rhetorical devices usage is being revisited, especially its ideological positioning and significance (Koller, 2004). As choosing the particular linguistic tools is driven by the intention to persuade the audience (Koller, 2004; Skorczynska & Deignan, 2006), the different ways the communicative tools are being used is attributed to three parameters: 1) How different the text readers are; 2) How cognitively challenging the subject matter is; and 3) What is the form of the medium (Cameron & Low, 2004). The notion that the linguistic tools are being actively negotiated by the participants in the dialogue process is also highlighted (Cameron, 2003), and that their usage is heavily influenced by cultural frameworks and constrains (Kövecses, 2005). Starting from a point that the process of shaping the dominant and generally accepted storylines in the sustainability field could be seen as a collective sense-making process (Linnér & Wibeck, 2020), it is necessary for those who are engaged in the process to use communicative tools and rhetorical devices that are suitable for all the actors to understand (thus take into account their cognitive, educational, social, economic and contextual limitations), as well as to use communicative tools that are consistent with (or, to be more precise, that are not opposed to) their values, ethical principles and emotional investments (Renzi et al., 2017). Focusing on the specific context of storylines that had emerged in the media in the process of rapprochement of the actors in the field of healthcare and that are related to sustainability, it is logical that some rhetorical devices are more suitable and effective than others, adjusting to the sensibilities of those actors.

2.4.4 Media representation and public perception

Finally, there is a question of how the media representation transfers into public perception. Whilst the media representations are tangible and measurable, public perceptions are far more elusive (Vu et al., 2019). Apart from the fact that the media need to make something a part of the public sphere before perceptions are to be formed, individual and group perceptions are very much dictated by social and psychological variables and the personal characteristics of the message recipients. Nevertheless, major arguments exist that emphasize the importance of perceptions. First, the crucial issues in a debate are often matters more related to the perception and the interpretation than facts (De Rycke et al., 2019). Thus, it is important to identify what people think, and not just whether the perceptions are true or not. Second, the policies should have the support of the relevant stakeholders, and for the stakeholders, perceptions are reality (Ohmann, Jones & Wilkes, 2006).

It is accepted that the level of media coverage of certain developments and issues can serve as one of the indicators of public awareness and opinion (Barkemeyer et al., 2009). Far from being the only one, on the contrary, a number of factors can influence the relationship between the public agenda, the policy agenda, or the corporate agenda (Banerjee, Iyer & Kashyap, 2003). Furthermore, corporate activities or policy processes are not necessarily connected to the extent of media coverage (Barkemeyer et al, 2009). In the context of public agenda-setting, there are two overall functions that media fulfil: they transmit or condense the public opinion and they actively shape the public agenda (Lewis, 2000). The relationship between public opinion and the extent and nature of media coverage is mediated and moderated by a number of variables, in affecting all the functions that are usually attributed to the media (Barkemeyer et al., 2009). Two of such are the ownership structure of a newspaper (Roulet & Clemente, 2018) and its target audience (Briggs & Burke, 2009). Considering everything, it is fair to assume that it is possible to capture the overall media framing and relate it strongly to the process of shaping of public opinion (Clemente & Roulet, 2015).

2.5 The theoretical gaps as avenues for research and the research design

The extensive analysis of the literature on sustainability, corporate sustainability, CSR, stakeholder theory, social influence and communication, media and agenda-setting, framing and storylines, as well as transforming the media coverage to public perceptions and ‘common knowledge’, pointed to certain ‘blind spots’ or research gaps, that enabled the construction of this particular thesis. In this sub-section, the overall rationale for the research is elaborated and several research questions to be addressed by this thesis are outlined.

The rise of the importance of sustainability in business practice and strategy is mirrored by the proliferation of the sustainability-related research in the management, strategy, and organization sciences, and it has been approached from various different perspectives. Despite the emerging scholarship, some of the aspects are still under-researched – the ambiguity of sustainability (Becker, Jahn & Stiess, 1999; McKenzie, 2004), how sustainability is differently understood and evaluated by different stakeholders (Greve, Palmer & Pozner, 2010), how the idea of sustainability is communicated between stakeholders in order to create general understanding between them (Norris, 2000; Lang & Lang, 2009; Herzig & Schaltegger, 2011; Clemente & Gabbioneta, 2017; Barkemeyer, Givry & Figge, 2018), how those understandings, evaluations and perceptions engage the stakeholders into interaction (Labuschagne, Brent & van Erck, 2005; Golob & Podnar, 2014; Roulet & Clemente, 2018; Pizzi et al., 2021), and how that affects the companies and their sustainability policies (Briassoulis, 2001; Du, Bhattacharya & Sen, 2010; Barkemeyer et al., 2020).

Following the ongoing fruitful stream of research, this thesis proposes an in-depth analysis of the stakeholder relations within the healthcare sector, with focus on pharmaceutical companies and their stakeholders. Researching in such context and setting should be very fruitful, as the specific literature on the pharmaceutical industry and its stakeholders is very scarce, and is specifically dealing with issues such as sustainability of drug development (Goldacre, 2012; Moors, Cohen & Schellekens, 2014), pricing of medicines (Scherer, 1993; Scherer, 2000), environmental impact of the sector (Veleva et al., 2003; Shalini et al., 2010; Belkhir & Elmeligi, 2018; Miettinen & Khan, 2022; Malmqvist et al., 2023), sector's image and social significance (Parker, 2007; Fischer, 2009; Goldacre, 2012; Bauchner & Fontanarosa, 2013; Rowe, 2013; Kessel, 2014), and sustainability/ESG reporting and stakeholder communication in the field (Adams & Kuasirikun, 2000; O'Riordan & Fairbrass, 2008; Schneider, Wilson & Rosenbeck, 2010; Fernandez-Feijoo, Romero & Ruiz, 2014; Iqbal & Keay, 2019; Berniak-Woźny & Kwasek, 2020; Consolandi et al., 2020; Kalia & Aggarwal, 2023). Also, the atypical nature of the relationships within the sector (as there is no clear producer/supplier – consumer dichotomy and because the connection has many intermediaries), should provide for more clues on how the stakeholder interactions and relationships could work in a complex sector environment.[1]

In order to gain stakeholder approval and understanding, business organizations tend to communicate with their stakeholders and try to explain the organization's perspectives on different complex issues. The idea behind this behaviour is twofold: 1) to persuade stakeholders in the probity of the organization's approach; 2) to obtain their approval, support, or advice. In the particular case of the corporate understanding of sustainability and sustainability related issues, companies wish to inform stakeholders how they understand the issue, their sustainability policies and agendas, and their sustainability performance. Ideally, for companies, stakeholders would understand and accept their perspective. However, for various reasons, companies usually have problems to communicate it and to gain acceptance and understanding. Most of the stakeholders do not have first-hand experience with the engaged company, especially in the areas that are not the company's primary concern (such as sustainability). In addition, the means of communication between the companies and the other stakeholders are somewhat limited, especially the means of direct communication. The information about sustainability performance is usually disseminated via specialized sustainability reports, which are universally accessible, but which are, in both the form and content, designed for small groups of interested stakeholders. Another problem is that the direct reach of companies via platforms suitable for the direct communication (such as websites and social media) is, for various reasons, very limited (Céspedes-Lorentea, de Burgos-Jiménez & Alvarez-Gil, 2003; Wanderley et al., 2008; Sones, Grantham & Vieira, 2009; Hutt, 2010; van Duuren et al., 2016; Morsing, 2017; Else, Choudhary & Genovese, 2022; Barkemeyer et

[1] More detailed description of the characteristics of the pharmaceutical industry and particular pharmaceutical companies is provided in a separate chapter – *Chapter 3 – Research setting and context – Pharmaceutical sector*.

al., 2020; Bose, 2020; Pizzi et al., 2021; Linder et al., 2023). Thus, between the companies and the other stakeholders, there are the communication intermediaries (infomediaries) (Deephouse & Heugens, 2009).[2] and because of that, the perspectives of companies and other stakeholders on different issues and ideas (such as sustainability) significantly differ (Becker, Jahn & Stiess, 1999; Newig et al., 2013).

In the particular research context and setting, the interest is on how corporate understanding of sustainability, sustainable practices and policies performed by companies are being intentionally and unintentionally reinterpreted to the other stakeholders (customers, media) and to the general public by the chain of different actors (social influencers and evaluators, media). The research design of the thesis proposes three separate studies. In the first study, the interest is on who do customers perceive to be the agents of social influence in the process of communicating sustainability strategies and projects, in the context of multi-stakeholder sustainability projects. In attempts to engage in the process of sustainable transformation, companies tend to establish direct and indirect connections with their stakeholders via multi-stakeholder sustainable projects. For these projects to work, companies tend to rely on social evaluators and social influencers to share and spread the company's sustainability message with those stakeholders with whom there is a communication breakdown. The first study of the thesis builds upon this and proposes an analysis of the particular sustainability project named 'Complete the Cycle', devised and conducted by the British pharmaceutical company *GlaxoSmithKline* in the period between 2011 and 2020, in cooperation with numerous stakeholders. Counting on their stakeholders to act as agents of social influence and

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[2] Information intermediaries (infomediaries) are individuals and groups who obtain, analyse, and interpret information, communicating their findings to others. In the particular case this research is focusing on, the role of infomediaries between the pharmaceutical companies and the general public is mostly performed my mass media outlets (newspapers, TV and radio stations and their internet outlets) as well as specific business or sector-oriented media outlets.

change the behaviour of their customers, the company was hoping to establish a network of relationships and communication avenues to promote their dedication to sustainability. The study provides answers to several questions raised in the literature review (in the specific setting) - Are customers (and subsequently, the general public) aware of the companies and their corporate sustainability? Who can help (and how) to amplify the corporate sustainability message? What is the potential impact of social evaluators and social influencers in such projects? What are the conditions that must be met for successful multi-stakeholder sustainability projects?

However, because of the cacophony of interpretations, it seems to be impossible to reach a ‘common knowledge’ about the complex issue of corporate sustainability, even with meaningful and deliberate intervention by an agency-having actors, but these interventions might bring opposed and conflicted understandings and opinions a bit closer. Apart from social influencers, who are examined in the first study of the thesis, the only such agents seem to be the mainstream mass media. Thus, the mainstream mass media use different tools and mechanisms to interpret the company and industry related sustainability agendas and frame the available information into narratives and storylines that shape public opinion or ‘common knowledge’. Without common knowledge, the perceptions of the companies and the other stakeholders (and the general public) would be too far apart, effectively not allowing for any communication or cooperation, in the process of the achieving of the common goal – the improved sustainability performance, policies, agendas, and strategies. Thus, the second and the third studies of the thesis focus on the mass media interpretation of sustainability in the context of pharmaceutical industry, accepting that the mainstream media assumed the role of ultimate social evaluators of corporate sustainability performance and strategies and the role of ultimate social influencer.

This thesis proposes a longitudinal qualitative study in order to better understand how particular companies in the pharmaceutical industry understand sustainability, how stakeholders perceive their intentions and actions, how the general public comprehends what sustainability is (both in general and in the very specific, industry and company related context) by being exposed to either social influencer or media interpretations, agenda-setting and framing, and which aspects of sustainability they find to be more or less important. More importantly, the thesis is also about how the complex notions (such as sustainability) are being digested, interpreted, and presented to the general public, how they become 'common knowledge' (prevailing public opinion), who has the agency to do it and what kind of discursive tools are being used in the process.

The research is constituted of three separate studies: 1) a qualitative longitudinal case-study of the multi-stakeholder sustainability project ('Complete the Cycle'), conducted by the British pharmaceutical company *GlaxoSmithKline* in the period between 2011 and 2020, in cooperation with the community pharmacies in the UK and the trade and the professional organizations, with the goal to understand how the corporate sustainability message is transmitted to the customers (and the general public) via social influencers and their ability to perform social communication (*Chapter 5 – Study 1 – Why do multiple-stakeholder sustainability projects fail? The case of 'The Complete the Cycle' programme (2011-2020) and examination of the social influencer engagement approach*); 2) a longitudinal qualitative empirical study of two major global pharmaceutical companies (*GlaxoSmithKline* and *AstraZeneca*), both based in the UK, in the period between 2000 and 2020, and how the sustainability issues, performances and policies of those companies were in fact transformed into common knowledge by the mainstream UK mass media (broadsheet newspapers, financial newspapers and industry newspapers), by employing their agenda-setting and framing capabilities (*Chapter 6 – Study 2 – Media framing of sustainability: The case of British pharmaceutical companies*

(2000-2020)) ; 3) as a continuation of the second proposed study, the third study is a longitudinal qualitative empirical study of the same two companies, in the same period, in the same mass media outlets, but focused on dominant media storylines and how are they being constructed (*Chapter 7 – Study 3 – Media Representations of Sustainability in the Pharmaceutical Industry: A Storylines Perspective*).

3. Chapter 3 – Research setting and context – The pharmaceutical industry

3.1 Introduction

Methodologically sound way to conduct research proposed in this thesis is detailed qualitative empirical case study of several companies (Bonoma, 1985; Eisenhardt, 1989; Van de Ven, 1989; Gummesson, 2000; Gummesson, 2005). However, in order to adequately respond to the research gaps, the research focuses on a specific industry – the pharmaceutical sector, and furthermore, on two particular companies – *GlaxoSmithKline* and *AstraZeneca*. Thus, the research setting and context are very specific – the thesis will analyse sustainability related to two very similar companies that belong to the same sector (pharmaceutical industry), in a very specific geographical, geo-economic and geopolitical context (United Kingdom), in a specific timeframe (2000-2020). Two similar companies are chosen for case study, *GlaxoSmithKline* and *AstraZeneca*, both UK based multinational corporations, listed on the *London Stock Exchange*, both part of the *FTSE 100 Index*, both employ tens of thousands of people all over the world, both present in global markets, both created some twenty years ago following the trend of big pharma mergers and groupings, and both important, even crucial, part of British business landscape and shapers of British corporate culture. The two companies are not chosen for comparison but in order to more accurately calibrate the data for the analysis and to have more reliable findings. In this chapter, the rationale behind this approach is explained.

Every particular industry or business sector has its specificities, ones that distinguish it from the other sectors. Some industries have a good reputation and enjoy high levels of stakeholder trust, other sectors have poor reputation (Cai, Jo & Pan, 2012; Oh, Bae & Kim, 2017; Aqueveque, Rodrigo & Duran, 2018). Some industries are considered ‘clean’ and environmentally friendly, while others are seen as great polluters

(Levy, 1995; Ochsner, 1998; Hoffman, 1999; Banerjee, Iyer & Kashyap, 2003). Some sectors are perceived as socially significant and overall drivers of the advancement of human societies, while others are seen as a burden and weight on humanity's shoulders (Gregory & Satterfield, 2002; Miller & Sinclair, 2012). Importantly, these specificities and characteristics which make every industry somewhat unique, have a huge impact on how organizations (companies) and the industry itself, are understanding their goals and missions, how companies construct their identities, conduct their sensemaking, build their dominant logics and conceive their strategies.

On the other hand, sectoral characteristics also have a great influence on how stakeholders see, perceive, evaluate and respond to companies and their actions or communications (Céspedes-Lorentea, de Burgos-Jiménez & Alvarez-Gil, 2003; Hutt, 2010). A big methodological advantage in using a specific industry and specific companies as a research setting is the fact that these specificities can be identified and treated as a relevant factor. In the existing research, sectoral alliance of companies has usually been treated as a control variable and not given much attention. However, the characteristics of the pharmaceutical sector are such that the assumption is that those specificities will dictate the unique way the companies communicate, the platforms the companies can use to convey their sustainability message, the possibility to resonate their sustainability messages via social communication and social influencers, and the way their actions and messages are being understood and translated by social evaluators, such as media. In this chapter, the characteristics and specificities of the pharmaceutical industry will be examined.

3.2 Economic, social, and political importance of the pharmaceutical sector

The healthcare field is one of the most important areas of human activity and engagement. In order to preserve and improve their health conditions, the developed world allocates between 10% and 20% of their GDPs to the cause (Gallet & Doucouliagos, 2017). A big part of those resources is related to the development, production and distribution of pharmaceuticals. In terms of its economic importance, the global pharmaceutical industry is one of the most powerful in the world, accounting for 1% of global GDP (Pisani & Meadows, 2019; Ostwald et al., 2020). For some countries and regions, the economic significance of the pharmaceutical industry is even greater than the global average and many countries (including the UK) consider it one of their most important strategic assets (Gambardella, Orsenigo & Pammolli, 2001). The United Kingdom represents one of the biggest pharmaceutical markets on global level, and the favourable climate in the terms of demand, expenditure coverage, developed scientific base, government regulation and overall good business atmosphere, resulted in the developed, globally competitive and robust pharmaceutical sector (Towse, 1996; Earl-Slater, 1998).

The global pharmaceutical industry is also an oligopoly, where the top 10 global companies cover 42% of the global market (McIntyre, 1999; Dukes, 2006). It is very difficult for new companies to break into the top ranks. Moreover, new companies and start-ups that have potential or that are developing new technologies are likely to be supported or engage in partnerships with existing companies (Tsai & Erickson, 2006). This makes the pharmaceutical industry very stable and attractive for investment as it attracts many institutional investors, such as banks or pension funds (Hansen & Hill, 1991; Bushee, 1998; David, Hitt & Gimeno, 2001). As institutional investors have an obligation to maximize long-term value and wish firms to be managed in order to deliver stable current returns and also make long-term investments (for instance, in R&D) to ensure future profitability, it is generally considered that investing in pharmaceutical companies is a long-term safe capital placement for them (Reinhardt, 2001; Lakdawalla, 2018).

Apart from their significant economic impact, as they are value-creating companies, big employers and significant taxpayers, pharmaceutical companies have a very strong social significance. The pharmaceutical industry is one of the biggest investors and supporters of scientific research and development in the developed world (ABPI, 2016). Many universities, research institutions, laboratories, science hubs, NGO's and even governments and international organizations are very much dependent on money received by pharmaceutical companies, either as investment or donations. Researchers and other highly qualified professionals seek to work in the industry, which is important for attracting talent. Secondly, the pharmaceutical industry has a socially significant product. Everybody uses medicines, either occasionally and to alleviate minor medical inconveniences, or constantly to treat severe illness (Goldacre, 2012). Medicines save lives and alleviate suffering of billions of people worldwide. In that sense, it is fair to say that there are few industries that have greater social significance. Consequently, the core activity of the pharmaceutical industry and their products very much affect how they are perceived, understood and evaluated by stakeholders.

3.3 Pharmaceutical companies and their stakeholders

One of the main characteristics of the pharmaceutical sector, originating from the uniqueness of their products, is the fact that it has significantly different and more structured relationships with their stakeholders, compared to other business sectors. First and foremost, the most important trait of the pharmaceutical industry is that the companies are very detached from the consumers of their products (the patients). Despite the fact that the vast majority of people on Earth consume medicines either occasionally or regularly, or will use them at some point in time, or have family or friends who use medicines, the direct contact between producers and consumers is limited to minimum. The pharmaceutical industry is one of the most heavily regulated industries in the world, precisely because the nature of their products and their societal significance (Abraham &

Lewis, 2000; Abraham & Lawton Smith, 2003). In addition, the level of autoregulation by industry bodies and associations is very high.

For most medications, advertising to the public is not allowed. In addition, the patients are usually not the ones who get to decide which medicines they should use. Between the producers and the patients there are many gatekeepers: regulatory agencies, which decide whether a particular medicine is efficient and safe enough to be introduced to the market; health insurers (in most EU countries those would be the national governments, as well as in the UK, via the *National Health Service* (*NHS*)), who get to decide whether a particular medicine should be available through national health insurance system; and finally, the medical professionals or physicians, who get to decide whether a particular medicine is the best therapy for a particular patient (Williams, Gabe & Davis, 2009). Depending on the therapeutic indication, but also depending on the country and type of regulation, the majority of medicines can only be made available to patients with a prescription from a physician. Thus, it we take the business perspective, the consumers (patients) are effectively forced to cede the important decision-making role to the physician. But, the physicians, despite calculating their professional responsibilities and legal liabilities into the decision to prescribe particular medicines, are not concerned with the financial side of the process (they are not the ones who get to pay for it), which makes them a sort of an imperfect agent for the consumer (Scherer, 2000).

This specific setting and positioning of the pharmaceutical industry at the intersection of the healthcare field and the business sphere leads to many difficulties for all the involved stakeholders, but for pharmaceutical companies in particular. First, strict regulation by regulatory authorities and governments concerning safety and efficiency of new medicines leads to the fact that R&D process is very long, laborious and expensive, with very low success rates (Schuhmacher et al., 2021). This means that in order to stay profitable, pharmaceutical companies have to cover the cost of failed R&D projects with the successful ones, which leads to the motive to maximize the price of medicines. This is, however, reliant on the way healthcare system in a particular country is established and who gets to pay for medicines. In the UK more than 90% of medicines are prescribed through the *NHS* (free to the point of use) and funded by the government[3], which means that the British government has a very strong positing when negotiating the price (Leask & Parker, 2007).

Second, the existence of gatekeepers who decide on the actual use of medicines, but gatekeepers who are not customers themselves, leads to unorthodox marketing practices by the companies, where they try to influence the prescription behaviour of physicians, very often in ways that are on the edge of legality, and certainly often seen as borderline unethical (Jastifer & Roberts, 2009; Perry, Cox & Cox, 2014). Third, the imposed distance between the pharmaceutical companies and their customers leads to difficulties in communication and stakeholder engagement. The patients know very little about the companies that make medicines they use, and they especially know little about non-core activities of the companies, such as their sustainability. The activities undertaken by the companies to make the rapprochement (such as, for example, cooperation between the pharmaceutical companies and patients' associations or pressure groups) are often seen as unethical and as a means of shadow marketing (Colombo et al., 2012; du Plessis et al., 2017). This naturally leads to detachment between the company and their customers (people who ultimately use their products), who are unable to develop familiarity or sentiments with companies and their products. On the other hand, relationships within the sector/industry actors (other companies, either partners or rivals, trade and interest organizations, etc.) and with governments, international organizations,

[3] In the UK, most of the patients would pay an NHS prescription charge, that was £9.90 per item in 2024, while some categories of patients would be relieved of such financial contribution. Effectively, the patients do not pay for medicines but for prescriptions, and the fee is the same amount no matter how much the medicine is paid for by the Government.

politicians and policy makers are far easier to successfully establish and maintain (Staropoli, 1998; Permanand & Altenstetter, 2004; Calero, van Leeuwen & Tijssen, 2007; Wogart, 2007; Tang et al., 2023).

3.4 Corporate sustainability and CSR in the pharmaceutical sector

Sustainability performance by any company, and subsequently the perception of sustainability by any company, is naturally linked to their core activities and to how they manage their resources and externalities (environmental perspective), and how they treat their stakeholders and communities (social perspective). It has been established that active corporate consideration for sustainability issues and subsequent positive ESG evaluations lead to better performance of pharmaceutical companies (Kalia & Aggarwal, 2023). For certain companies and sectors, it is fairly easy to establish and understand their environmental footprint or social standing. If their core business activity is undoubtably related to negative environmental impact (for example, mining or oil companies) or negative social impact (for example, gambling or tobacco industry), they are automatically going to be perceived as companies with contested legitimacy, companies with structural flaws and as being unsustainable in the long-term (Galvin, Ventresca & Hudson, 2004). On the other hand, some sectors and industries are far more ambiguous, especially those that are detached from their customers and other stakeholders, such as the pharmaceutical industry. However, environmental and social characteristics of the sector are important, as eventually they are the fundamentals for analyses, social evaluation and as an object of framing.

The environmental side of corporate sustainability of the pharmaceutical companies, and their CSR engagement, has been studied in much detail. Some of the environmental issues and problems related to the pharmaceutical sector have been known for years, and they emerged from the very nature of the industry. In the terms of their core activity, apart from substantial focus on R&D, the pharmaceutical industry is essentially a branch of the chemical (biochemical) sector, and all the issues and problems related to chemical industry mostly applies to pharmaceutical industry as well (Shalini et al., 2010). The main issues and problems are the extensive usage of natural resources to obtain necessary ingredients for chemical synthesis of the active ingredients of medicines and chemical pollution of the land, rivers, lakes, seas and the air (Boxall et al., 2012; de Oliveira Souza et al., 2021; Wilkinson et al., 2022). Essentially, the pharmaceutical industry is a big polluter, especially relative to other industries (Belkhir & Elmeligi, 2019). The first-order problems related to chemical pollution of the environment then spillover and magnify other environmental problems, for example, the loss of biodiversity. Being recognized as a major sustainability problem, it is also acknowledged that pharmaceutical companies have understood the problem and made significant effort in improving transparency and processes of production, in order to pollute less, but with much room to do way more (Miettinen & Khan, 2022; Malmqvist et al., 2023).

Recently a new problem was identified, and even though it is connected to the process of chemical pollution, it is far more industry specific. The contamination of the natural environment with pharmaceutical pollutants not only causes harm to the biosphere, but also causes long-term biological changes to living organisms, that could lead to unforeseen and catastrophic consequences. For example, the exposure of the living organisms to antibiotic pollutants could cause those organisms to develop resistance to antibiotics, which means that in the future, existing antibiotics will not be effective in preventing and fighting bacterial infections. Furthermore, the microorganisms too are developing resistance to antibiotics and evolve into super microorganisms, potentially capable to cause huge epidemics in the future, causing enormous loss of life and material wealth (Bengtsson-Palme, Kristiansson & Larsson, 2018; Grigoryan et al., 2019). The danger of antibiotic resistance has been acknowledged by all the relevant actors in healthcare and plans and programs to reduce the antibiotics pollution have been devised and are currently being implemented throughout the world, such as introducing stricter regulation, building waste treatment centres, raising awareness among the patients and implementing projects of safe disposal of unused medicines (Vatovec et al., 2021; Desai, Njoku & Nimo-Sefah, 2022).

Finally, with the development of the various tools to assess environmental performance of different organizations that go beyond the immediate processes of production and pollution, it has been determined that pharmaceutical companies also have huge carbon dioxide (CO_2) emissions footprint (Veleva et al., 2003; Belkhir & Elmeligi, 2019). It is only logical, because of the size of the pharmaceutical companies, magnitude of their operations and necessary logistics in order to achieve their business objectives, but it was something that managed to pass under the radar for a very long time, precisely because of the fact that focus was on visible and easily identifiable externalities. Pharmaceutical companies are increasingly acknowledging the negative impact they have on global CO_2 and other greenhouse gasses (GHG) emissions and connected issues, such as global warming and climate change, and are generally seen as being very responsive and willing to be the part of the solution, promoting both sustainability reporting and positively managing issues such as eco-efficiency (Hahn et al., 2010), supply chain management, etc. (Veleva et al., 2003).

When it comes to the social sustainability segment, things are far more complicated. Unlike with environmental sustainability, where problems are easier to detect and propose ways to improve the performance, the very notion of social sustainability includes a complexity of stakeholders and their networks, a plethora of social causes that could be influenced and improved, as well as variety of different applicable contexts (cultural, geographical, political, etc.) that have to be taken into account. Thus, when it comes to possible meaningful positive impact of the pharmaceutical companies, it is far more visible and measurable in the environmental segment (Consolandi et al., 2020). Another problem, and more important one, is the embedded paradox that characterizes the pharmaceutical industry – the core of the business and its prevailing business model is based on providing positive solutions for different sets of social issues. This characteristic is, theoretically, putting the pharmaceutical sector at the centre of several proposed business models that could provide the opportunity for solving societal problems, such as the concepts of creating shared value, social business model or corporate community involvement (Hansen, Sextl & Reichwald, 2010; Blowfield, 2012; Peterson, Stamp & Kim, 2012; Porter et al., 2012). However, as the demand for health solutions is basically unlimited[4], theoretically and practically, and the supply is very much limited and left to the for-profit organizations, the demand will never be met and also the companies will have the incentive to limit the supply and keep high prices because this is something that insures their profit.

This paradox then manifests itself in the corporate behaviour – the pharmaceutical companies at the same time provide solutions for societal problems and withhold solutions for societal problems. For example, some diseases are effectively left untreated because the pharmaceutical industry is not interested searching for drugs which will benefit only a small market (Nowotny, Scott & Gibbons, 2001). Another issue is arbitrariness in determining prices of medicines (in countries where healthcare is not socialized, for example the US), and the fact that price index increases for

[4] The debate about the nature of human understanding of health and the possibility of organised healthcare that would provide for it, either for-profit or not-for-profit, is very interesting and it involves the analysis of many different factors, economic, social, political and even philosophical. Unfortunately, there is no room in this thesis for a deeper dig into the matter, but the most interesting and compelling explanation of the perspective that demand for health is unlimited and thus the only functioning way to provide for any healthcare is private and for-profit (as the not-for-profit healthcare systems, because of the demand, would eventually grow out of control, until they smothered the material capacities of any given society, but without the possibility to achieve its goal) can be found in a book by a controversial British politician and Minister for Health, Enoch Powell. See: Powell, E. 1976. *Medicine and Politics: 1975 and After*. London: Pitman Medical.

pharmaceuticals has been by far outpacing those for the products of other industries (Scherer, 1993). This is closely followed by the reluctance of the companies to adjust the prices of medicines to the purchasing power of the patients (for, example, the high prices of HIV/AIDS medicines in some of the world's poorest countries, where companies often prefer to completely be absent from the market then to lower the prices) (Jenkins, 2005). The companies are, of course, justifying this behaviour by pointing out to various obstacles to their business, such as the regulatory pressure, shorter period of market exclusivity (DiMasi & Paquette, 2004) or competition from the generic medicines manufacturers (Bae, 1997; Dickson & Gagnon, 2004)[5], but in reality, the biggest pressure on companies comes from their shareholders and their demand for profit. This paradox not only determines and limits of what pharmaceutical companies can and will do to mitigate societal problems, but also affects how companies communicate with their stakeholders and the wider community, and what media representations and public perceptions of the industry are.

3.5 Public perception of the pharmaceutical sector

How particular pharmaceutical companies and the pharmaceutical sector in general are being perceived by the general public depends on several things. First, stakeholders tend to get impressions about the industry according to their own personal experiences. One would expect that, in that case, all the people in the world would have made some sort of impression, as everyone uses medicines or has a close person that uses

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[5] Many studies examined the influence of patent expiry and entrance of off-brand competitors on medicine sales and profits, and the findings are pointing out that the sales of branded medicines will inevitably fall, and profit margins will decline, but that is very much dependant on the specific country and in many cases the drop in sales and profit margins is very small. In any case, the 'patent cliff' is always calculated in business projections of the pharmaceutical companies. See Vondeling et al. (2018) and Caves et al. (1991). On the other hand, the impact of government distortion of pharmaceutical markets (price regulation, public funding, etc.) is far more difficult to determine, especially when it comes to financial performance of the companies. However, governmental interventions are designed to expand the accessibility to medicines, thus having a positive effect on market expansion, which potentially represents a significant business opportunity for companies as well. See Mensa Sorato et al. (2020).

medicines. However, because of the mentioned detachment between the companies and the patients and the fact that customers do not have free choice which medicines to use, this first level of impression is very weak. When it comes to other stakeholders, they have contacts with the companies that are mostly based on professional and commercial relationships. Medical professionals and physicians often communicate with pharmaceutical sales representatives, who are trying to encourage them to prescribe medicines produced by particular companies (Leib & Scheurich, 2014). It is similar with pharmacists, who generally believe that very often pharmaceutical companies use very aggressive marketing methods but believe that their clinical judgement and professional integrity cannot be endangered by such a behaviour (Farthing-Papineau & Peak, 2005; Tejani et al., 2015). On the other hand, the relationship between pharmacists and patients is far more complex and, in a way, it reflects the variety of relationships that could emerge between doctors and their patients. What is important for this study is that this relationship evolves beyond professional and could develop from analytic-authoritative and opportunistic-expedient relationships into emotive-interactive and reliant-paternalistic relationships (Austin, Gregory & Martin, 2006; Worley et al., 2007; AlGhurair, Simpson & Guirguis, 2012). What this means that very often relationships between pharmacists and their customers (patients) evolve to form a stronger bond, mutual understanding, even friendships. This is especially evident in community pharmacy settings.

One way to engage in stakeholder dialogue is to try to establish direct means of stakeholder communication. The same as with most of the companies, the pharmaceutical sector companies can use two approaches. First, they can use specialized annual reports, such as sustainability/ESG reports. Second, they can try to engage with the stakeholders using social media outlets, such as *Facebook*, *Twitter*, *Instagram*, *TikTok*, etc. Both ways have their advantages and limitations, and most of these limitations are reflexions of the specificities of the industry itself.

There is a vast stream of literature on corporate sustainability/ESG reporting and several papers have explored how companies from the pharmaceutical sector manage this issue, from different perspectives. Companies from the pharmaceutical sector were among the first to start publishing sustainability reports (Adams & Kuasirikun, 2000) and are generally very active in the field, with their reports being of good scope and quality. This supports the notion that companies in controversial industries are more active in CSR communication than companies in non-controversial industries (Kilian & Hennigs, 2014), because they see it as a good way to possibly mitigate the existing controversies. It is established that even though the pharmaceutical sector companies emphasize in their reports that they consider the community to be their primary stakeholder (Fernandez-Feijoo, Romero & Ruiz, 2014), they actually mostly provide information that are of concern to shareholders and investors (Sweeney & Coughlan, 2008). Both of the companies selected for this research, *GlaxoSmithKline* and *AstraZeneca*, have been especially highly praised for the quality and the scope of their sustainability/ESG reporting (Iqbal & Keay, 2019).

When it comes to the scope and the quality of the reports, most of them present in detail and in high quality on the high standards of products, customer data safety, compliance, customer satisfaction, and dialogue on customer issues, but are of lower substance and quality regarding access to healthcare products in relation to the economic conditions and other demographic factors of the current global society (Berniak-Woźny & Kwasek, 2020). When it comes to community engagement, the reports emphasize the corporate dedication to support science and education, with significantly less attention to other community related issues (for example, culture and sports, social activities and charity, etc.). Interestingly, the level of attention given to environmental issues is lower than level of attention to social and governance issues (Schneider, Wilson & Rosenbeck, 2010). However, the main problem with sustainability/ESG reports is the fact that they are usually accessed by a very narrow audience, the one that already has a significant interest in a particular company or sector. Even if it is possibly a good way for companies to establish communication with their stakeholders, in practice it remains a one-way avenue.

The reputation of the pharmaceutical industry can be seen as contradictory. Despite the benefits it brings to the world by developing new medicines, its orientation towards profit and relatively high profit margins are viewed with mistrust (Bauchner & Fontanarosa, 2013; Moors, Cohen & Schellekens, 2014). Occasional reports about sometimes dubious practices with risky consequences for patients add to the mistrust and bad reputation (Fischer, 2009; Goldacre, 2012). Historically, the global pharmaceutical industry enjoyed a good reputation up until 1980s and 1990s, when a combination of several different negative developments contributed to the decline (O'Riordan & Fairbrass, 2008). First, a series of high-profile drug safety scandals shocked the world, especially in mid-1990s, followed by medicines being withdrawn from the market and damages being awarded to the numerous victims. These scandals were heavily reported by the media, who generally tend to focus on negative corporate developments. The shattered image of the pharmaceutical industry and the loss of trust also meant that policy makers had to impose stricter regulation of the industry, which had significant consequences on their business models and strategies (Zec, Rüling & Wang, 2020).

Second, with respect to both its image in popular culture and the way its practices are presented in the media, the pharmaceutical industry is often viewed as one that makes profit by exploiting people in need. This image is very strong all over the world, but there are differences between various countries – in the US, the issue of price is important, because those without, and even many with, health insurance find medicines unaffordable. This aspect is less emphasised in countries with comprehensive insurance schemes, such as in Europe (Fischer, 2009). Also, because of its business model and overall characteristics, including the fact that lives and well-beings of people depend on it, the pharmaceutical industry is very much exposed to different types of conspiracy theories – both the ones that emphasize the immorality of the concept of making profits from people's misery and also the ones that focus on political and parapolitical instrumentalization of medicines and healthcare (Singler, 2015; Andrade, 2020; Sobo, 2021; Wertheimer, 2022). Nevertheless, generally, the industry's reputation is not positive. Some authors even state that for many people, pharmaceutical industry is contested in the same way as tobacco, armaments or gambling industries (Parker, 2007; Kessel, 2014). On the other hand, some empirical research suggests a somewhat different picture, especially in European countries.

Very extensive research conducted by public opinion agency *YouGov* in the UK in 2013 concludes that the reputation of the pharmaceutical industry in UK was generally positive among the public, owing to the economic benefits it provided, but that it suffered from a trust deficit. There was scepticism of the industry's motives and concern that its goals were misaligned with the public need. Low familiarity of the industry was matched by low awareness of recent sector issues, including fines, job cuts and ongoing investigations. The British public generally knows little about the pharmaceutical industry, with just 9% of the public saying they are familiar with it. Despite a low level of familiarity, it enjoyed relatively good levels of favourability, with 34% saying they feel positive about the industry, on a par with the travel and leisure sectors (Rowe, 2013).

3.6 Pharmaceutical sector as an interesting research setting

These described characteristics of the pharmaceutical industry and particular pharmaceutical companies speak in favour of choosing the industry and particular companies for case studies, as a good research setting for examination of corporate sustainability communication, social evaluation and social influence engagement and sustainability agenda-setting, framing and storyline building by the mainstream mass media, and how those frames and storylines affect the general public opinion and create common knowledge (public understanding). The rationale is as follows – ordinary people form their opinions, give their evaluations, build-up their sentiments and are inclined to change their behaviour either by first-hand or second-hand experiences (either via personal contacts with interested stakeholders or persons who exert social influence), or by getting information from the various types of media outlets (mainstream, social, fringe, etc.). Personal contact with social influencers might work but is still heavily conditioned and the success of such an approach depends on many different factors. Because of the characteristics of the pharmaceutical industry (severed contact between producers and consumers, because of all the intermediaries), the general population is more likely to align with the mainstream media and their framings and interpretations (social media has low reach, fringe media also). Thus, the mainstream media seems to be the only stakeholder with the agency to conduct meaningful framing and create the common knowledge.

In a normal situation, where company is generally familiar to the public, where company has normal contact with the customers (product usage and advertising), who can in return identify the company and their products easily and can develop affinity or dislike towards them, or where the company's environmental or social performance is generally familiar, it is fairly easy to establish direct communication between the company and the general public, which makes framing of complex ideas such as sustainability easier. On the other hand, if the case is like with the pharmaceutical industry (companies), their products and their environmental and social performance, where the customers are effectively cut off from the company and where, despite the fact that so many people use their products, they are unfamiliar with them, framing of complex ideas is far more complicated and not so straightforward process. The lack of direct contact and communication forces other stakeholders to step up and act as intermediaries (agents of social evaluation and influence) and even interpreters of the sustainability message. This poses a challenge for the acceptance of the message as it creates a cacophony of different and very often confronted opinions and interpretations, which inevitably leads to ambiguity and misunderstanding. Thus, it is very difficult to have something as a common knowledge in such a situation. Therefore, in order for common knowledge about sustainability of pharmaceutical companies to exist, discursive super-agent is needed, who can capture, analyse and process all the viewpoints into one or few coherent frames and storylines all the actors could agree upon.

This research proposes the analysis of multi-stakeholder sustainability projects where certain individuals step up and act as social evaluators and influencers and an analysis of mainstream printed media framing of corporate sustainability in the pharmaceutical sector, focusing on salient messages, agenda-setting, framing, evaluation and dominant storylines and the mechanisms for their shaping.

4. Chapter 4 – Methodology

4.1 Introduction

In this chapter, a brief explanation is presented on how this research was conceptualized and designed, as well as the rationale behind the choices made in the process. The chapter starts with an overall contemplation about the personal motivation for doing the research. This is followed by views on ontological and epistemological issues. This personal understanding of both the world we are living in, its institutions, realities and potentials, as well as the possibilities of scientific discoveries and its usefulness, is something that inevitably influences, motivates and shapes the efforts of any researcher (Karle & Karle, 1988; Ryan, 2014). This is followed by the description of the research methods, the process of data selection, collection and data analysis.

4.2 Research philosophy, ontology and epistemology

Every researcher approaches their work under the influence of different sets of research paradigms, as those paradigms are very important factors that create and perpetuate different tensions within the research itself (Robson, 2011; Denzin & Lincoln, 2018). One of the everlasting research paradigms out of many is, for example, the one that confronts quantitative and qualitative research, portraying quantitative analysis as objective, universal and verifiable and qualitative analysis as non-scientific, subjective and interpretable (Patterson & Williams, 2005; Belk, 2006). These issues of methodological suitability and general trustworthiness of the chosen analytical process and conclusions made by its application raise even more important questions about the limitations of research itself and the capability of humans to acquire knowledge. They influence the overall evaluation of the effort and the subsequent matters of reliability and the ultimate value of the produced contribution to the vast sea of human knowledge. In this section of the thesis some of the personal considerations and contemplations on the mentioned issues will be sketched out.

As any other human being in any conceivable activity, researchers are limited in their work. They are limited by many factors – sheer physical circumstances (for example, temporal or spatial restraints), by lack of funding for their research, etc. A wide set of personal, contextual, organizational, and institutional conditions should be met in order for scientists to be successful in their work (Heinze et al., 2009). They are also restrained by their physical and cognitive capacities. Most of these variables are (relatively) easily identifiable and could be processed in such a way to add the context to anyone's research. However, there is another level that influences the researchers as well. Researchers cannot be value-free while doing research. Their assumptions and beliefs shape the research process and researchers should be aware of that. They should always have this in mind and re-examine and re-value their standpoints and beliefs and should be capable of reflexivity (Saunders et al., 2019). Furthermore, researchers' worldviews, assumptions and standpoints, how they perceive reality and how they search for knowledge - their ontology - is probably the most important part of their research effort (Wahyuni, 2012; Lincoln, Lynham & Guba, 2018; Saunders, Lewis & Thornhill, 2019). One's ontology further influences one's epistemology, way of contemplating and seeing the research subject, and, implicitly, one's way to build theoretical assumptions (Whetten, 1989). Epistemology and ontology also have very strong effect on choosing research strategies and methodologies. Thus, it is very important for a researcher to be open and honest, to both themselves and to others, about their ontological and epistemological positions. Even more important, a researcher first has to figure it out.

Last century saw a struggle between different concepts of understanding and processing the world around us and whether that world is something that really exists or is it just a projection of our ideas, experiences and perspectives. This tension, driven by various philosophical, political, economic and other turbulences of the 20th century, also led to an expansion of the horizons in the field of science and somewhat a gradual shift from strictly rationalistic or 'objective' research approaches to exploring more interpretative and 'subjective' means of understanding the world around us (Sandberg, 2000). The tension then develops within the researcher, as one is torn between the desire to produce the knowledge that would be seen as completely objective, and the understanding that in the domain of social phenomena such 'perfect' knowledge is impossible, especially if the topic of the research is something that is related to deeply subjective concepts, such as perceptions, evaluations, images, images, frames, etc (as this research is). Navigating between the desired but impossible objectivity and complete relativisation of knowledge is a difficult and taunting state. In social research, strict positivism is often associated with quantitative methods and strict rhetoric which focuses on precision, generalizability, reliability, and replicability and the scientific inquiry to be a series of logically related steps that make claims of knowledge based on objectivity, standardization, deductive reasoning, and control within the research process (Creswell, 2013). On the other hand, constructivism is usually associated with qualitative methods, literary and informal rhetoric in which the researcher relies as much as possible on the participants' views and subjective meanings of the different phenomena. Thus, constructivist type of research is designed from the bottom up, starting from individual perspectives, going to broad patterns. Comparing these two paradigms, positivist and constructivist research would be situated completely opposite to each other (Kaushik & Walsh, 2019).

However, my research experience and personal viewpoints pose me to reject this type of strict exclusivity. I do understand my research philosophy to be very much a mixture of critical realism, which explains what we see and experience in terms of the underlying structures of reality that shape the observable events (Bhaskar, 1998), and pragmatism, which is, as a research paradigm, based on the proposition that researchers should utilise the philosophical and methodological approach that works best for the particular research problem that is being investigated and often associated with mixed-methods or multiple-methods in research (Kaushik & Walsh, 2019). I acknowledge a reality that exists apart from human existence and apart from human consciousness. To put, it simply, there is a world that exists largely independently of the researcher's knowledge of it (Sayer, 2004). Science is a social construct, but it examines and operates within a reality that existed before (Archer et al., 1998). I understand critical realism as a meeting point between opposed positivist view, which relates to the philosophical stance of the natural scientist and entails working with an observable social reality to produce law-like generalisations, and relativist (interpretivist) viewpoint, which emphasises that humans are different from physical phenomena because they create meanings and science examines those meanings. Critical realism tries to answer questions by looking at structures and mechanisms that influence phenomena (Robson, 2011), but also emphasises structures and agency as mechanisms leading to phenomena (Bhaskar, 1998). Thus, critical realism is prone to analysing models – it sees science as a process of constructing models that represent or map the intended aspects of the world and comparing them with rival plausible alternative models (Van de Ven, 2007). This allows the researcher to be very creative and inclusive with their methodology and approach to research itself – one can use experimental and manipulative designs, one can make and test hypotheses, and use both qualitative and quantitative research methods, etc. (Guba & Lincoln, 1994).

My research philosophy and subsequent choice of topics and methods are in a way driven by my own professional and personal motivations. I decided to research sustainability because I deeply care about the state of the world and because I am worried that unless we acknowledge the necessity to change the ways we produce and consume, we will make the world uninhabitable, and we will destroy rather than improve our valuable social institutions. I want to do my best in the process of understanding what, why and how we need to change and be among the ones providing theoretical and practical recommendations to do that. As for contributions, I wish my effort to result in reliable and relevant analysis and a solid addition to the existing corpus of knowledge. Or, to rephrase the wise words of Kirchherr (2023), I wish my research would help to solve humankind's most pressing problems and not fall under the category of boring, repetitive, meaningless, pointless and useless "scholarly bullshit" (Kirchherr, 2023, p. 167.).

4.3 Research design

As a result of complex theoretical grounding and the specific research context and setting, an important question emerged, and that is how this research should be designed in order to best answer the questions raised. Especially in the field of healthcare, which is a very complex field characterised by dynamically changing inter-relationships and tensions, conventional research designs predicated on linearity and predictability need to be reconsidered (Greenhalgh & Papoutsi, 2018). The overall complexity, the multitude of research questions raised, the different sources and analytical methods used, suggested that a classical monograph-type study would not be the best way to structure it, as there is a danger that the complexity might overwhelm the clarity. Instead, the decision was made to organise the research in three separate but connected smaller studies that would focus on more specific issues, and to present them in such a fashion. Here an overview of the design will be given. More detailed explanation is provided in the following chapters, where each chapter represents one separate study (Chapter 5, Chapter 6 and Chapter 7).

First, a case study was conducted of the project named 'Complete the Cycle', that was implemented in the UK between 2011 and 2020. This project was designed by

GlaxoSmithKline in partnership with various organizations and individuals from the pharmaceutical sector (mostly community pharmacies), in order to promote a specific environmental goal – collection and recycling of used inhalers. This case study, based on the content and discourse analysis of primary and secondary data (interviews, surveys, media outlets, social media and forums, etc.) will allow better understanding of how communication and cooperation between the pharmaceutical companies and their stakeholders regarding environmental projects worked. Specifically, it will allow a better insight into the process of social evaluation and the importance of social evaluators and influencers, as well as the media, in the process of promoting and disseminating corporate sustainability initiatives.

Second, a longitudinal study of the mainstream printed media in the UK in the period 2000 to 2020 was conducted in order to determine the salience of sustainability topics and issues in the period, as well as how the media framed and evaluated those topics and issues. The goal of the study was to use the sentiment, content and discourse analysis to establish what were the emerging or important themes the media seem to care about, thus shaping the public view and perception on what actually corporate sustainability in the pharmaceutical sector was.

Third, following on from the second study, the third study is a continuation of the inquiry about the role of the mainstream printed media as social evaluators and social influencers, and it also focused on content and discourse analysis of the mainstream print media in the UK in the period between 2000 and 2020, but explored the concept of sustainability storylines. These are logical keys or evaluations, created and framed by the media, in which sustainability reporting on pharmaceutical companies by the media should be read and understood. The study also explored the different ways, methods and mechanisms by which those storylines were being created.

4.4 Research methods

As this research is segmented into three separate but connected parts, different types of research methods were used for each study, and they are described in more detail in each of the following chapters. However, the main and unifying characteristic of all the research methods used is that they are based in the paradigm of qualitative analysis. Qualitative research is a complex notion but can be described as one that has a goal to address questions that are concerned with developing an understanding of the meaning and experience dimensions of humans' lives and their social surroundings and, thus, is a very broad umbrella term for different research methodologies that describe and explain persons' experiences, behaviours, interactions and social contexts, usually without the use of quantitative and statistical procedures (Strauss & Corbin, 1990; Fossey et al., 2002; Sandelowski, 2004). Qualitative methodology is an interpretive approach (Hennink, Hutter & Bailey, 2020), based on words and their analysis (Hammersley, 2012).

When trying to understand what qualitative research means, it is important to address its focal points and its goals. First, qualitative research is focused on depth rather than scope of knowledge and qualitative researchers usually try to find out in-depth and intimate information about individuals or smaller groups of people. Second, the goal of qualitative research is to inquire about how and why people behave in certain ways, think, and make meaning as they do, rather than focusing on what people do or believe on a larger scale. Third, qualitative research can be situated on several levels and is especially suitable for the analysis of different micro and meso environments (for example, family or business organization). Finally, qualitative research and inductive analysis approach focus on discovery rather than verification, as new information can be reflective of new practices or behaviours, new forms of social organization or structures, thus promoting theory building (Ambert et al., 1995; Welch et al., 2011).

Being an umbrella term, the concept of qualitative research encapsulates many different research traditions, approaches and methods of analysis (Marshall & Rossman, 2016), and its complexity, as well as ambiguity, messiness and time consumption, are things that very often lead to the idea that it is an inferior method to positivist quantitative method, especially in business and management studies (Parker, 2004). However, for the specific needs of this research, a qualitative research methodology and its features are a superior model of analysis, as this research is focused on understandings, subjective experiences and perspectives. There are many different approaches that could have been used, but here I will briefly explain the methods chosen and its main specificities, while the very detailed methodological considerations will be provided in separate chapters that focus on specific research segments. The main methodological tools used are case study, content analysis, discourse analysis and sentiment analysis.

4.4.1. Case study approach

The main methodological design chosen for the first study of the thesis is a case study. The main characteristic of a case study approach is exactly this possibility of an intensive analysis of an individual unit, whatever this unit might be (Denzin & Lincoln, 2018). Thus, it could be argued that by choosing a case study approach, one does not really make a methodological choice but rather a choice of what is about to be studied. However, the case study is precisely a good choice as the focus on the individual unit of analysis makes the research intensive – it provides more detail, richness, completeness, variance and depth than cross-unit analysis, and it also provides for information about changes over time and related to the environment. On the other hand, the examination of the single sample of the class of the phenomena has been criticized for the inability to provide for the reliable information about the broader class itself, as the information obtained by examining one case cannot be generalized (Abercrombie, Hill & Turner, 1984; Gerring, 2004). However, this antagonism and bipolarity has long been challenged and the potential of the case study approach do give an in-depth information about complex issues such as processes and multi-stakeholder interactions qualifies it as an appropriate methodology within the realm of critical realism (Eisenhardt, 1989; Easton, 2010). The detailed explanation of the case-study methodology used in the first study of the thesis is provided in Chapter 5. As for the remaining two studies of the research, the main methodological approaches are content, discourse and sentiment analysis.

4.4.2 Content and discourse analysis

The cornerstone of any qualitative methodological approach to research is content analysis – a process of analysing the actual content of a variety of data, predominantly textual or verbal data. It is a process that enables the reduction of phenomena or events into defined categories so as to better analyse and interpret them (Harwood & Garry, 2003). Most frequently used data source for content analysis is written text (Krippendorff, 2012), but any sort of data could be used, and the analysis could be done manually or with the help of various emerging automating tools, such as word processing software (Stemler, 2015). The emerging tools are very helpful to the researcher, and they enable not only the better classification of the data, seeing the patterns and categorisation, but also a certain level of quantification of the data (as content analysis actually started as a part of quantitative methodology). The main condition for content analysis to provide for meaningful information is the quality of the data used. Especially for the case study approach, that presumes a thorough and detailed investigation, a variety of sources are required, and this research will use both primary and secondary data (interviews, social media and internet forum posts, newspaper articles, corporate documents, correspondence, meeting minuets, etc.)

In the process of the content analysis of any textual source, two important facets stand out – analysis of discourse and the analysis of sentiment. Discourse analysis has a wide range of meanings, and it would be very time consuming and complicated to address all the nuances but, essentially, it comes down to the process of analysing how is language used (Brown & Yule, 1983). Language is not just a tool of communication but is also a powerful medium that creates social realities (Gill, 2000). The breaking of the monopoly of positivist approach and the pluralization of different approaches in social sciences emphasizes the importance of all the possible media through which social realities are being created. Although originating in linguistics and semiotics, the concept of discourse and the methodological process of discourse analysis gained much importance, even in management and organizational studies. Of course, the very notion of discourse is very complex and varies from simple interpretations focusing on conversations between two people and grand theories, which state that all political and social world is constructed of discourses. Thus, the understanding, scope and application of discourse is really relative to the theoretical lens used (Howarth, 2000). When it comes to this research, which is embedded in the position of critical realism, it really relies on the ontological dimension of discourse and discourse analysis. It relies on the idea that the social world is made of independently existing sets of entities with certain inherent properties and intrinsic casual powers, whose interaction causes events and processes in the real world, but discourses are seen as particular objects with their own properties and powers (van Dijk, 1997; Howarth, 2000). Thus, it is necessary to see language as an object of social reality and a structured system with its own logics, and the goal of discourse analysis is to explore the ways the language interacts with the other objects of social reality, or the way discourses reproduce and transform the material world (Parker, 1992).

4.4.3 Sentiment analysis

Finally, as a part of content analysis, and, in a way, discourse analysis, a process of examining an evaluation of certain content in specific contexts could be significantly important to researchers. There are several ways to understand sentiment analysis.

Primarily, it is a process of gathering and analysing people's opinions, thoughts, and impressions regarding various topics, products, subjects, and services (Wankhade, Rao & Kulkarni, 2022). To narrow it down, sentiment in this context can be characterized as positive or negative evaluation expressed through language (Taboada, 2016). It is a complicated process, as it is difficult to define a concise set of factors that really affect how creators' sentiment (or, broadly speaking, human sentiment) is expressed, perceived, recognized, processed, and interpreted in natural languages (Cambria et al., 2018). Still, it is potentially a powerful tool for researchers to extract the necessary information, as well as to aggregate the collective sentiments (Devika, Sunitha & Ganesh, 2016), and it is a process that could be done manually or with the use of emerging new analytical software technologies. In this research, the manual sentiment analysis of newspaper articles has been conducted and the process will be explained in more detail in Chapter 7.

4.5 Data selection

The complexity of the overall research, multiplicity of research questions and investigation pathways that are related to the case study research and content analysis, where researchers strive to make general conclusions from a limited number of analysed cases (Gummesson, 2000), requires various types of data to be collected and analysed, both primary and secondary. It also requires utilisation of different methodological approaches and angles to data examination and interpretation (Gummesson, 2005). From the very beginning of the research, the overall methodological framework for data selection, collection and analysis has been created, but it was also something that was open to adjustment and expansion, in order to have more robust and empirically backed case. In this section, the overall description of methods used, and sources collected and analysed will be provided, while the more detailed accounts will be given in the following chapters. The first study of the research is based on analysis of various primary (interviews) and secondary data (media articles, social media posts, internet forums, corporate sustainability reports, etc.). The second and the third studies are based on mainstream newspaper articles.

The case study approach in the qualitative methodology requires in-depth and studious analysis of all the possible angles and contexts of the chosen phenomenon, and thus requires the collection and the analysis of the widest possible corpora of available and accessible relevant data. This includes both primary and secondary sources. There are different interpretations about what are primary and secondary sources, as different areas in social sciences and humanities understand them differently. In historiography, for example, the primary sources are considered to be the raw materials of history – different original documents and objects that were created at the time, and they differ from secondary sources, which are testimonies that tend to analyse, retell and interpret events, usually including a temporal or geographical distance (that include the benefit of hindsight) (Kragh, 1989). However, the purism of the historiographical approach is not beneficial in many fields. In the field of organizational and management studies, especially in the case study approach, the primary sources are the considered to be the ones that were acquired with the intention to gather more information about the issue, problem or a process, and designed in such a way to ensure that the right questions are being asked in order to get the answers to research questions. Thus, the primary sources are the ones that come with the bias that are the result of the research design process (Pannucci & Wilkins, 2010; Šimundić, 2013).

The main primary sources used in this research are interviews. Conducting interviews is one of the most common and powerful ways in which we try to understand humans and their behaviour, and the process of interviewing includes a wide variety of forms and a multiplicity of uses (Fontana & Frey, 2005). When it comes to management and organisational research, interviews represent the most widely used qualitative method, whether they are used as a stand-alone technique, or as part of a mixed-methods approach (Bluhm et al., 2011). However, as there is now a universally accepted realisation that interviews are not (and cannot be) completely neutral tools of data gathering, because they represent an active interaction between people (the researcher and the one who has the knowledge), which necessarily leads to a sort of negotiated or contextual results (Fontana & Frey, 2005), there is a valid critique argumenting that some scholars who use qualitative methods (and specifically interviews), are subject to tension between the diversity of qualitative research and standardised criteria for evaluation and reliability, that are often grounded in positivistic paradigms (Cassell & Symon, 2015). However, this is the tension that is characteristic for any type of interpretative research and is not specific for the usage of interviews. The reliability of a study using interviews as primary source really depends on the onto-epistemological paradigm of the study itself, and it is up to the authors to explain their case to the reviewers, thus defying both the perception that in qualitative research anything goes, but also the regressive trend towards obligatory standardization (Reissner & Whittle, 2022). Whatever the tensions may be, interviews are being used more and more by management scholars and they are being recognised as invaluable gateway towards scientific discovery. In this research, the semi-structured interviews with pharmacists, inhaler users and other participants in the project were conducted and it is explained in more detail in Chapter 6, as well as in the Appendices 2 and 3.

The second and the third study of this research are based on the analysis of secondary data – newspaper and magazine articles. Newspaper and magazine articles were selected as data sources for the research for two reasons, one theoretical and one practical. The theoretical reasoning, explained in Chapter 2, is that there is little direct interaction between the companies chosen for the analysis and some of their stakeholders (and members of the general public), with the latter typically forming perceptions about a company based on information that is provided by the media (Zavyalova et al., 2012;

Chandler, Polidoro Jr & Yang, 2019). On the practical side, the presumption was that it would be very difficult to capture and understand the public perception of individual pharmaceutical companies and their sustainability activities (in general context, as opposed to a particular initiative or project, investigated in the first study), and thus to have their public evaluation, by means of interviews or surveys. To be more precise, it would require surveys of huge magnitude and very large numbers of participants, because the overall recognition of particular companies and their activities is generally very low in the general population (Rowe, 2013), and targeting specific groups or populations for surveying might give a biased and distorted results. The media attention and media evaluation were therefore seen as a proper substitutes.

Deciding to explore the coverage of sustainability related issues involving two companies (*GlaxoSmithKline* and *AstraZeneca*) in the period between 2000 and 2020, the *Nexis* database was used to search and collect all the articles within the timeframe which were published in the following newspapers and magazines: *The Guardian* (including *The Observer*), *The Times* (including *The Sunday Times*), *The Financial Times* and *The Pharma Letter*. The justification for the selection of mentioned newspapers and magazines is the fact that they are mainstream broadsheet newspapers and do cover sustainability related issues to significant extent, not just in general, but also related to particular industries and companies (Doulton & Brown, 2009; Koteyko, 2012; Barkemeyer, Givry & Figge, 2018; Diprose et al., 2018; Barkemeyer et al., 2020). The initial goal was to include other publications as well, to make sure that the pool of sources better matched reading preferences of the general population. Examining tabloid (boulevard) newspapers with high circulation numbers, such as *The Sun*, *The Daily Mail* or *The Daily Mirror*, showed that they simply do not report enough about sustainability related issues, especially considering the selected companies (Boykoff & Mansfield, 2008). The tabloid (or popular) press is very much oriented towards indulging the tastes of wider audiences, and properly informing about important social issues is not its primary concern (Örnebring & Jönsson, 2004; Bingham, 2012). There is, however, a possible limitation to this. The 'highbrow' broadsheets are generally associated with a readership of higher education, social status and material wealth (Chan & Goldthorpe, 2007). There is a danger to assume that something that was intended for a specific audience is accepted by the general population without any contest.[6]

By selecting *The Times* and *The Guardian*, an attempt was also made to avoid (or to possibly level out) any potential political and ideological bias, considering the fact that *The Guardian* has the reputation of being left-wing and liberal leaning and *The Times* has the reputation of being right-wing and conservative leaning (Sparks, 1987; Carvalho & Burgess, 2005). In addition, the selection of *The Financial Times* and *The Pharma Letter* to be included in the analysis ought to have calibrated the overall data sources pool, in the case that financial/economic or professional/industry viewpoints were neglected by the mainstream broadsheet newspapers. The media is not a homogenous ensemble, but a rather heterogeneous set, where different media outlets have different political or economic motives, and they have different reach (Roulet & Clemente, 2018). There was also a pragmatic element affecting the selection – all the mentioned sources were available to search and download from the *Nexis* database, in the selected period (2000-2020).

[6] The British media landscape is very interesting phenomenon itself and the debates about social, class and political characteristics of it are not just a topic of numerous academic inquiries, but also a part of British popular culture. As a beloved fictional British Prime Minister Jim Hacker pointed out: "Don't tell me about the press... I know 'exactly' who reads the papers. *The Daily Mirror* is read by the people who think they run the country. *The Guardian* is read by people who think they 'ought' to run the country. *The Times* is read by the people who actually 'do' run the country. *The Daily Mail* is read by the wives of the people who run the country. *The Financial Times* is read by people who 'own' the country. *The Morning Star* is read by people who think the country ought to be run by 'another' country. *The Daily Telegraph* is read by the people who think it is!" See: Lynn, J. 1986. *The Complete Yes Prime Minister: The Diaries of the Right Hon. James Hacker*. London: BBC Books.

The *Nexis* database was searched by using company's name in the search engine, in both full and abbreviated form (for example "*GlaxoSmithKline*" and "*GSK*"), and by using terms "sustainable" and "sustainability". This approach had its deficiencies, as it is certain that some of the companies' activities related to sustainability had slipped under the radar, simply because the term "sustainability" or "sustainable" were not used in some of the article texts. However, one of the purposes of this research is to understand how "sustainable" and "sustainability" is perceived and understood by wider audiences, and thus it was important to be semantically precise. Also, the ambiguity and versatility of the term makes very difficult for the researcher to choose what to search for, and certainly something would have been omitted or missed in the process anyway. By using the mentioned search, more than 1,000 newspaper and magazine articles were found for the period between January 2000 and December 2020, downloaded and sorted by company and by outlet. At this stage, the articles were prepared for analysis, first by sorting, then by renaming the files in order to provide essential data for easier software processing (file name to include name of the newspaper, date of publication and title of the article), and finally by formatting the texts themselves to be suitable for the qualitative analysis software.

After the initial preparation, all the downloaded articles were uploaded to *ATLAS.ti* qualitative analysis software. Using qualitative analysis software in academic research not only helps researchers to get better, more systematic and consistent results, but also is a gold standard of contemporary academic qualitative research, especially in content analysis of large portions of texts, such as newspaper articles (Kaefer, Roper & Sinha, 2015). The articles were then sorted by adequate document groups (by company, by year, by newspaper, etc.), for easier navigation and later manipulation. After that, the articles went through initial reading, without being coded, to see if there were duplicates and irrelevant ones. Duplicates and irrelevant articles were then removed from the program and deleted. By irrelevant articles, we refer to those articles in which terms “sustainable” and “sustainability” were used in completely different context then the one we are interested in (for example, a lot of articles mentioned “sustainable bond yield” or “sustainable market share price”). The detailed account of the processes of coding and data analysis will be given in the following chapters.

5. Chapter 5 – Study 1 – Why do multiple-stakeholder sustainability projects fail? The case of 'The Complete the Cycle' programme (2011-2020) and examination of the social influencer engagement approach

5.1 Introduction

There is a high level of agreement among societal actors, that sustainable transformation, (a need to reduce and mitigate the human negative impact on the environment, improve social institutions and reduce societal difficulties and to make more robust and stable economies) is one of the most pressing and important tasks the humanity is facing in modern times (Torgerson, 2000; George et al., 2016b). This drive towards sustainability can be seen among the general population, companies, political organizations and policy makers, in all spheres of the globe (Basiago, 1995; Nidumolu, Prahalad & Rangaswami, 2009; Lubin & Esty, 2010; Stoughton & Ludema, 2012). In the business sector, after a period of reluctance and opposition, a new paradigm emerged, the one that assumes that businesses should be an active part of the sustainability drive, not only because of the fact that very often companies are seen as societal actors who have negative impact on sustainability principles and are, subsequently, put under a lot of pressure to change this behaviour, but also because they can benefit in many ways by being part of it. Almost all relevant theoretical approaches to business and management studies, such as stakeholder theory (Dyllick & Hockerts, 2002; van Marrewijk, 2003) or resource-based theory (Barney, 1991) tend to agree that moving towards sustainability is beneficial for the companies, for various different reasons.

For most of the companies and business sectors, the idea of how to be more engaged in sustainability transformation comes from either their interaction with stakeholders (Steurer et al., 2005; Góes et al., 2023) or via pressure from policy makers (who develop and formulate the sustainability related policies as a result of wider societal concerns and force the businesses to comply with them) (Porter & Van Der Linde, 1995; Cerin & Karlson, 2002; Colombo, Pansera & Owen, 2020). For the vast majority of the companies and business sectors it is straightforward to determine what should be changed and also easy for other societal actors to understand the problems and communicate their concerns (Steger, 2004). However, there are also sectors and companies where this model is not so clear and straightforward. There are three main reasons for this. First, some sectors and companies are by their nature generally unfamiliar to the wider audiences and societal actors actually know little, if anything, about their environmental, social and economic impact (Russell, Haigh & Griffiths, 2013). Second, for some companies and business sectors due to the importance of their contribution to society (if they provide goods and services that are seen as essential for society), their environmental performance tends to be either overlooked or sidelined (Kopnina, 2017). Third, some companies and industries are facing the problem of not being able to establish meaningful communication with stakeholders, either because of regulation or because of the very nature of their operations, which then impairs their ability to have meaningful dialogue with stakeholders and to properly understand their concerns but also convey their own sustainability programs, strategies and initiatives (Milbrath, 1995). The pharmaceutical sector is one of those that actually fits within all three of these categories.

Because of the fact that pharmaceutical companies do not have close relationships with some of their stakeholders (the producer – consumer dichotomy)[7] and cannot establish direct lines of communication, their sustainability efforts are mostly driven

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[7] Under the concept of 'producer-consumer dichotomy', this research assumes that modern marketing is seen as an interactive process, where relationships develop between the companies and their customers, in which they rely on each other to co-create better value in the exchange process in which they participate. When it comes to communication, this type of approach to marketing can be seen as a sharp shift away from one-way communication from the company to the customer towards a two-way communication process. This approach makes the company (or the sector) more familiar to customers, thus allowing the customers to form opinions and even develop sentiments towards companies. See: Syam & Dellaert (2001).

either by regulation or by a set of industry standards (Eckelmann, 2004). However, this approach can be seen as complying and responsive, but it hinders the possibility for companies to be more proactive and thus reap the reputational and other benefits of the proactive sustainability approach (Bhupendra & Sangle, 2015; Wijethilake, 2017). Moreover, the disconnection between the pharmaceutical companies and their stakeholders leads to a misalignment between companies and their stakeholders about what should be done and how it should be done, as the process of planning sustainable policies and strategies is done without meaningful insight from stakeholders. On the practical side, it leads to many difficulties in project implementation and, ultimately, to project failures. In order for sustainable projects to have more chance of succeeding in these circumstances, the companies have to rely on other individuals and organizations that could serve as a bridge between them and their stakeholders (customers). Many organizations and individuals can fulfil this role, but on the community level those would have to be individuals and organizations that are well-known and trusted by the members of the community. These individuals and organizations are called social influencers (Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013). This study explores and uses the theoretical lens of social influence (Goldsmith & Goldsmith, 2011; Bond et al., 2012; Abrahamse & Steg, 2013; Young et al., 2017) as a starting point for the empirical examination of the multi-stakeholder communication and cooperation in sustainability related projects.

This research proposes a case study approach investigation of an environmental project devised by pharmaceutical company *GlaxoSmithKline* called ‘Complete the Cycle’, that was introduced in the UK in 2011 and lasted until 2020, when the project was discontinued. The project envisioned that the company would organize collection and recycling of used medical inhalers, in partnership with pharmacies. Local pharmacists would act as agents who could connect the company and the users, who would advertise, explain and convince the inhaler users to return their used inhalers to the pharmacies, where they would then be collected and taken by specialized recycling companies that were hired by *GlaxoSmithKline*. The case study analysis of this particular project allowed detailed examination of how multi-stakeholder sustainability projects work in practice as well as consideration of the drivers and the obstacles to their implementation. It allows analysis of whether and to what extent social influencers, notably, local pharmacists and local environmentalists) could act as the bridge between the companies and their detached customers and whether the power of social influencers is sufficient for successful implementation of environmental projects. Local and community pharmacists and local environmentalists have been chosen for examination in the role of social influencers as they are the only ones (alongside media, to some extent) who actually have a personal and direct contact with inhaler users and can thus exert their influence on them.

The study is structured in the following way. First comes the theoretical considerations segment, where the main focus is on the concepts of social evaluation and social influence and who, how and in which circumstances can act as a social influencer. The research setting is then outlined – providing an explanation and brief history of the 'Complete the Cycle' project. This is followed by the methodology section, where methodological approach, dataset and data analysis process are explained. Third is the findings section, where main conditions for project success or failure are analysed: inherent motivation; contextual factors; visibility; overall project complexity and subsequent information asymmetry. Finally, the study ends with the discussion of the findings in the light of presented theoretical considerations.

5.2 Theoretical considerations

In this sub-chapter of the study, the main relevant theoretical considerations are presented and unfolded, focusing on the idea that companies should engage in environmentally friendly behaviour, for various reasons that are beneficial for both the company and other stakeholders; that multi-stakeholder collaborative projects are one of the best and most efficient ways to do it; and also exploring the theoretical concepts of social evaluation and engaging with social influencers as partners in the process of devising, implementing and overseeing the environmentally friendly sustainable projects and programmes. The sub-chapter is concluded with the explanation of the specific and particular research setting of the study ('Complete the Cycle' recycling project and partnership between *GlaxoSmithKline* and other actors (most notably the community pharmacists and inhaler users who were involved), streamlining towards identification of the gaps in previous research and formulation of the relevant research questions.

5.2.1 Importance of CSR and stakeholder cooperation in its implementation

As it is established in the Literature review part of the thesis (Chapter 2), it is now generally almost universally accepted that business organisations do have a wider social responsibility to think about and that they should not only be concerned about the investment returns and profits, but also about their wider impact on the society, especially on the communities within which they operate (Carroll, 1998; Waddock, 2008; Crane, Matten & Moon, 2010). This 'corporate citizenship', or acceptance (recognition) of the companies by their communities, which enables the companies to fully develop and exploit all of their potentials, nowadays depends not only on the tangible benefits the particular company brings (providing valuable and beneficial goods and services, providing employment and economic development, etc.), but also on how the company mitigates the negative externalities for the community, how it communicates with the community, how it engages in the process of managing stakeholders and their expectations, accepts the community concerns and generally shows interest and willingness to be a positive agent in the life of the community (Steurer et al., 2005). Being for-profit organisations, business do have to prioritise their economic viability, however, despite the fact that being socially and environmentally engaged does lead to certain trade-offs and costs to companies (Margolis & Walsh, 2003; Hahn et al., 2010), the overall consensus is that corporate sustainability is a net gain for companies, in both tangible and intangible ways (Dyllick & Hockerts, 2002).

Accepting sustainability as one of their organizational imperatives, the companies tend to embrace different perspectives on how to proceed with sustainable transformation. There is a vast scholarship on different angles examining the process, focusing on drivers that are either organizational, functional, or individual (Stoughton & Ludema, 2012). When it comes to the process of the operationalization of the sustainable transformations, the scholars differ in opinion whether the change comes from cultural paradigm shifts within the organizations (Schein, 2004; Borland, 2009), or just slight modifications in behaviour that are the result of either stakeholder pressure or promise of reward (Fineman & Clarke, 1996; Harris & Crane, 2002). Whether the company is addressing the issues of sustainability change from an organizational, a subcultural, or individual level, companies' sustainability efforts on a project-by-project basis are probably the best way to acquire further insight into how sustainability imperative develops both within an organization and in communication with stakeholders (Linnenluecke & Griffiths, 2010).

With the imperative to be actively engaged in the process of sustainable transformation and with the prerequisite that these corporate plans and actions should include the concerns and wishes of corporate stakeholders, in practical terms much emphasis is put on cross-sector collaboration, where the process of addressing environmental problems and societal issues are based on partnerships between public, private, and non-profit actors (McDonald & Young, 2012). The assumption is that such cross-sector collaborations can build-up the knowledge and momentum necessary to deal with widespread and very often complicated, even illusive, sustainability problems. Cross-sector project collaborations potentially provide a stage to stakeholder groups whose needs and wants are often underrepresented in conventional sustainability interventions driven solely by companies (Pedersen et al., 2021).

Unlike the usual type of corporate activities, such as firm-specific or industry assigned codes of conduct or business-driven initiatives, many companies nowadays engage in multiple-stakeholder initiatives, as they are seen as a strategic vehicles for developing more comprehensive and widely accepted social and environmental standards (de Bakker, Rasche & Ponte, 2019), as having participants from business and societal interest groups, as well as individuals, as members and participants in governance structures, in theory allows for a better possibility of communication between the different partners and more efficient and satisfactory overview and control over the initiative (Fransen, 2012). However, multi-stakeholder initiatives usually facilitate large and formally structured collaborations, often to set standards for sustainability and are involving a large number of companies and NGO's operating transnationally, under very formal arrangements.

On a lower scale, companies tend to engage with some of their stakeholders to create collaborations in sustainability projects that are supposed to address certain specific sustainability problems and issues, thus achieving two goals – first, addressing the problems that are identified by the communities as important (and subsequently improving the corporate sustainability credentials) and, second, building the capacity for cooperation with the stakeholders (Strebel & Posch, 2004; Cargo & Mercer, 2008). There is a vast literature on the intersection of sustainability and project management (Silvius & Schipper, 2014; Sabini, Muzio & Alderman, 2019). Most of those studies focus on either a shift of scope in the management of projects (managing time, budget and quality, managing social, environmental, and economic impact, etc.), to a shift of paradigm of project management (from an approach that can be characterised by predictability and controllability, to an approach that is characterised by flexibility, complexity and opportunity), to a mind shift on an individual level (from delivering requested results, to taking responsibility for sustainable development in organisations and society) (Silvius & Schipper, 2014). The current stakeholder management practices can overwhelmingly be described as a management-of-stakeholders approach, i.e. making stakeholders comply to the project needs (Eskerod & Huemann, 2013), where companies actually take complete charge of the project to the point of almost excluding their stakeholders from the project implementation and evaluation governance. Thus, it is quite common for many projects to fail due to insufficiently articulated and/or unresolved tensions and/or trade-offs among the project stakeholders (Loch & Kavadias, 2011). This study is positioned in such a way that it would explore those tensions in sustainability context, in a specific industry setting, using a theoretical approach of social influence as a theoretical grounding.

5.2.2 Social influencers in multi-stakeholder sustainability projects

Following the axiom that the business sector has become an integral part and even one of the drivers of the universal sustainable transformation paradigm shift (Waddock, 2008; Crane, Matten & Moon, 2010; Miklian, 2019; Fet & Keitsch, 2023; Fischer et al., 2023), interesting questions arise on how exactly that process unfolds. Sustainable transformation is seen as set of changes that require radical, systemic shifts in values and beliefs, patterns of social behaviour, and multilevel governance and management regimes (Olsson, Galaz & Boonstra, 2014), which are manifested in conceptualisation and implementation of multi-stakeholder sustainability projects and initiatives (Wiek et al., 2012). Driven by either intrinsic or instrumental reasons, companies engage in different sustainable projects. These projects can be different in their ambition, scope and the engaged actors (Sabini, Muzio & Alderman, 2019), and when it comes to businesses, they can either be internal or multi-stakeholder.

Both types of projects require communication for success (Barendsen, Muß & Silvius, 2021). In the case of multi-stakeholder projects, in order for them to be successful, businesses have to put much more effort in engaging in meaningful communication so they could build productive connections with their stakeholders (Moser, 2010; Adomßent & Godemann, 2011; Newig et al., 2013; Crane & Glozer, 2016). Two-way smooth communication with the stakeholders is the paramount for companies, because they need to inform the stakeholders about their sustainability perspectives, but also, they need to be part of the wider feedback loop, where they could acknowledge, assess and rethink their sustainability perspectives in relation to what the stakeholders prioritise and demand. Whether companies engage in sustainable behaviour for intrinsic or instrumental reasons, they need the acknowledgment from other societal actors for their activities, and the vast majority of societal actors cherish the normative view on sustainability – where harmful practices, habits and processes should be altered in order to preserve the natural environment and advance social and economic institutions (Donaldson & Preston, 1995; Garriga & Melé, 2004; Brulle, 2010; Newig et al., 2013).

In order for sustainable transformation to eventually occur, it is required for all the societal actors to change their behavioural patterns, which includes both the particular companies and all of their stakeholders. Considering the fact that the companies are usually the ones that possess the knowledge, the know-how and the resources to engage in sustainable transformation most efficiently, it is expected of them to be the initiators and to commit to do the lion's share of the work. This is very much in accordance with the 'polluter pays' principle, as they are the ones who are using the joint natural resources for their profit and are responsible for the negative externalities (pollution) (Schwartz, 2010; Ambec & Ehlers, 2016; Hill, 2016). Even if 'polluter pays' principle can be considered to be universal and justified in the sphere of business – society relationship, in some sectors the practical conditions are particularly determinant factor for its application. In the field of healthcare there is a huge gap related to the capacities, knowledge, and the motivation for sustainable transformation between the for-profit companies and other stakeholders (especially patients and medical professionals) (Scholz et al., 2018; MacNeill et al., 2020; Malmqvist et al., 2023). What forces the companies to drive the sustainable transformation initiatives in the healthcare sector are the moral (when companies are seen as the ones that pollute, thus an 'immoral' actor) and capacity-related (when companies are seen to have better access to know-how and resources) disproportions between the companies and their stakeholders. Even when there is almost a monopoly/monopsony relationship between the suppliers and the users (as is often the case with the pharmaceutical sector), which presumes that the companies cannot be punished in the market by the users of their products for their unsustainable behaviour, the companies are driven towards sustainable transformation. It is because they want to achieve better recognition, reputational benefits and overall accretion of their moral capital.

For this setting, where the companies are expected to be in the frontline and take initiatives to preserve the environment and advance social institutions, to be productive, focusing on the active encouragement of the stakeholders to change their behaviour, it requires the active input and meaningful cooperation of all segments of society (Goldsmith & Goldsmith, 2011; Young et al., 2015). There are many obstacles in this process, as stakeholder engagement in multi-stakeholder projects depend on many dimensions (contextual, behavioural, cognitive, emotional, etc.), which are all proposed to propel distinct outcomes, however, they are all closely connected to notions of communication, cooperation and collaboration (Viglia et al., 2023).

There are different theoretical lenses through which the process of companies approaching their stakeholders and attracting them to their sphere of influence in order to encourage them to engage in more sustainable behaviour could be better understood. One of such theories is social influence theory (Forgas & Williams, 2001; Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013), which is fundamentally based on the concept of business organizations partnering up with individuals and organizations with high level of social influence and impact in order to better communicate and disseminate their sustainability policies, strategies, agendas, and projects, and thus mobilize stakeholders to support their sustainable initiatives, usually in multi-stakeholder cooperative projects. Scientific inquiries, especially in the fields of social and behavioural sciences, have been trying to shed more light on the issues how to influence someone's behaviour for a long time, and the multicomplexity of findings can generally be summed up with the conclusion that it is done either by punishment, reward, persuasion, or personal influence, or the combination of all of these factors mentioned (Cialdini & Goldstein, 2004; Falk & Scholz, 2018). As the concepts of influence on behaviour are widely explored in psychology and cognitive sciences, this study will focus on business organizations and the field of sustainability.

There is, of course, a boundary to what tools a business organization can use to influence others. Companies are limited in their potential to use some of the existing behaviour change strategies on some of the stakeholders, as, for example, they can offer a reward as an encouragement for stakeholders changing their behaviour, but their capability to punish someone is naturally restrained, or, more precisely, limited to some stakeholder relationships (investors can, for example, punish the executives, and the executives can punish the employees, but it would certainly be counterproductive if the companies sought to somehow punish their customers) (Baucus & Beck-Dudley, 2005; Mackey et al., 2022). Another condition that hinders the imposition of influence on stakeholders of businesses, especially the customers, is the fact that some companies are rather limited in the possibility to establish direct contact with their stakeholders (customers), either by their nature or by their fear of being involved in some kind of damaging controversy, such is the case with pharmaceutical companies, where regular supplier – customer communicative dichotomy characterized by advertising and marketing is either forbidden or heavily regulated (and certainly considered ethically dubious) (Devlin et al., 2007; Ball & Mackert, 2013). Because of this, the business sector is increasingly relying on the influence of other people or organizations to spread their messages or intentions, especially concerning sustainability (Goldsmith & Goldsmith, 2011; Bond et al., 2012; Abrahamse & Steg, 2013; Young et al., 2017). The power of social influence can reshape the human behaviour in many different ways, consciously or unconsciously utilising all the tactics that were mentioned before (punishment, reward, persuasion and even education) (Goldsmith, 2015).

Humans are multidimensional creatures, as their biological and social sides are intertwined and support each other. Fulfilling the basic biological needs certainly comes first, but in order for people to enjoy life, fit in the society and thrive, they also need to establish reciprocal, meaningful and fulfilling connections with others. In order to do that, humans tend to align their thinking and behaviour to the attitudes and behaviour of others (Turner, 1991; Davis et al., 2015). In order to reduce confrontations and overall stressful social attrition, their desire for conformity tends to express itself is very strong ways. Subsequently, people are concerned what others think of them and how that affects their social reputation. There is a strong motive to imitate the behaviour that is considered positive, appreciated and valued in the society. This positive behaviour is institutionalized as desirable, either formally (for example, as a part of educational system) or informally, as interactions within social groups. In these interactions within social groups, people share information, and the value of each piece of information and the reputation of those who share information, leads to the internalization of that particular information, which then becomes the basis and the foundation for further thoughts, feelings and actions (Goldsmith & Goldsmith, 2011). The societal transmission of information, but at the same time the transmission of values, directives and behavioural patterns, thus becomes a powerful force of social communication and even social leadership (Bond et al., 2012; Ruben & Gigliotti, 2016). There are different types and forms of social communication, as it can be both scripted and non-scripted, formal and informal, organized and spontaneous, and it can use but does not require intermediaries, such as media outlets (Back, 1951; Goldsmith & Goldsmith, 2011).

Narrowing it down to the understanding of sustainability as a desirable societal characteristic and goal (Shields, Šolar & Martin, 2002; Raymond et al., 2019; Linnér & Wibeck, 2020) and following the research by Abrahamse and Steg (2013) on sustainable changes in consumption behaviour, the efficiency of different social influence approaches in corporate sustainability context vary, but the most effective ones seem to be the ones engaging face-to-face interaction between the 'influencers' or 'opinion leaders' and the ones whose behaviour is to be affected (Goldsmith & Goldsmith, 2011). Proposing the typology of social influence in sustainable multi-stakeholder projects (Abrahamse & Steg, 2013), most effective social influence approaches were: 1) 'Block leaders and social networks', where, for example, people who recycle encouraged their friends and neighbours to follow their example and do the same things. This type follows the idea that people are more likely to act if the sustainable transformation information is provided by someone who already belongs in their social network. The stronger the ties in the network are, the more likely the information will have an effect on changing the behaviour (Weimann, 1994; Goldsmith & Goldsmith, 2011). 2) 'Public commitment making', where, for example, community or social circle members publicly pledge to conserve water. The idea to publicly uphold someone withing the community to change their behaviour has been linked to the need for consistency and maintenance of social pressure, in order to adhere to the given commitment (Cialdini, 2001; Abrahamse & Steg, 2013). 3) 'Modelling', for example, someone showing their neighbours how to separate trash or compost. People are more likely to commit to a certain behaviour if they see others engaging in it (Young et al., 2017).

The social influence theoretical approach focuses on the idea that for an individual or an organization to be able to affect the behaviour of others and drive them towards a more sustainable lifestyle, it is necessary to establish efficient means of social communication, because this is the only way for this message of sustainable transformation to be successfully transmitted. The individuals and organizations that do not have the prospect to do so, ought to rely on those individuals and organizations that do – 'social influencers' or 'opinion leaders' (Goldsmith & Goldsmith, 2011; Ruben & Gigliotti, 2016). However, there are a lot of conditions for this approach to be successful in practice and there is a significant gap in the literature concerning this issue. The literature on social influence in the sphere of sustainable transformation is rather scarce in general, as the social influence theory in organizational and business studies have mostly been applied in the marketing and advertising contexts. In their paper on social influence approach to sustainable changes in behaviour, Abrahamse and Steg (2013) identified several possible moderators that could affect the efficiency of the approach. First, they established that the magnitude of the effect size of social influence approaches depended on the target group, and their proposed explanation is that the social influence approach may be more effective in groups where social interactions are more prevalent (Abrahamse & Steg, 2013). Further, they established that social identity could play a significant role as it seems that social influence tends to be more effective with people who identify more strongly with their social group, and behaviour could thus be moderated by group identification. This suggests that interpersonal and face-to-face communication is the most efficient way to engage in the social influencer approach, but recent studies have shown that other means of communication can also be effective, such as social communication via social media and other types of media outlets (Bond et al., 2012), but not to the same extent (Young et al., 2017).

Building upon the literature on social evaluation and social influence (Goldsmith & Goldsmith, 2011; Bond et al., 2012; Abrahamse & Steg, 2013; Ruben & Gigliotti, 2016; Young et al., 2017), this study proposes to address several issues. First, as it is established that one of the most important prerequisites for the success of social influence intervention is the choice of the target group (both those who should act as social influencers and those whose behaviour should be influenced), this study examines, in a specific empirical context, the process and the validity of this identification and choice. The study is set to explore that misjudging the potential of possible social influencers' ability to act as such (to be 'block leaders' or employ the 'modelling' strategy) and to reach their community can negatively affect the success of the sustainability project and change in behaviour. Second, Abrahamse and Steg (2013) call upon researchers to engage as "more systematic empirical research linking social influence mechanisms to behaviour change is needed" (Abrahamse & Steg, 2013, p. 1783). More studies about different mediators, such as, for example, the personal characteristics of social influencers (their values, attitudes and beliefs in driving corporate sustainability, their education and awareness, etc.) (Visser & Crane, 2010), or types of interaction between the stakeholders (in-person, face-to-face, online, etc.) (Young et al., 2017) or conditions under which social influence approach unfolds are needed. Examining the contextual factors that multiply complexity of variables are also important. The interpersonal approach characterizing the social influence approach to affecting changes in behaviour seem to pose many challenges to big organizations such as businesses, especially in certain business sectors. Certain companies and business sectors will presumably operate with limitations to their ability to mobilize, incentivize and support social influencers to share their sustainability message or projects, as that is their nature. This research, among other things, explores these limitations in a specific (pharmaceutical) sector. Finally, the interpersonal social influence remains one of the important ways to promote more sustainable behaviour, but it is complementary with the other means of social influence, such as trustworthy mainstream media outlets. The mainstream social influence theory focuses on individuals as social influencers, but this study also explores the idea that other entities could act as such too. Specifically, in the context, it is argued that mainstream media could also be seen as ‘social influencers’ and important to the success or failure of a multi-stakeholder sustainable transformation programmes or projects.

5.2.3 Research setting – ‘Complete the Cycle’ scheme outline

Before outlining the ‘Complete the Cycle’ project, a few lines should be written about its main protagonist, the *GlaxoSmithKline* pharmaceutical company. *GlaxoSmithKline* (*GSK*) is a multinational pharmaceutical, biotechnology and consumer goods company, headquartered in the UK (Brentford, London), one of the biggest and most influential global pharmaceutical companies and a major force in shaping the overall British business and scientific landscape. It was established in by a merger of *Glaxo Wellcome* and *SmithKline Beecham*, already pharmaceutical powerhouses at that time, companies that can both trace their long history for almost 200 years (Davenport-Hines & Slinn, 1992; Jones, 2001). The company is primarily listed on the *London Stock Exchange* and is a constituent of the *FTSE 100 Index*. It has a very strong R&D portfolio, as it manufactures products for treating major diseases, such as asthma, cancer, infections, diabetes, and mental health problems. In the terms of their corporate sustainability performance and ratings, *GlaxoSmithKline* was regarded as one of the best companies in the pharmaceutical sector (Van Arnum, 2012).

When it comes to inhalers (and there are different types of inhalers, including pressurised metered-dose inhalers and dry powder inhalers (Capstick et al., 2024)), to treat diseases such as asthma or chronic obstructive pulmonary disease (COPD), *GlaxoSmithKline* was at the time one of the biggest global manufacturers and distributers, holding about 40% of the global market share (Abbas, 2022). When it comes to the UK, the *GlaxoSmithKline*'s market share was even bigger. There is an estimate that around 73 million inhalers are dispensed in the UK annually (out of which around 35 million respiratory inhalers were made by *GlaxoSmithKline*, generating 450 tonnes of waste), and each of these inhalers is made of materials that are potentially harmful for the environment: plastic, aluminium or stainless steel, propellant gases and active substance (medicine) (Appiah-Anane, 2021). As the inhalers were constructed using different materials, they were not suitable for communal recycling schemes, which means that up to 2011 the inhalers simply ended up on the landfill.

'Complete the Cycle' inhaler recycling scheme was one of the first of the kind in the world, and it was advertised as the first ever attempted in Europe (Anonymous, 2011a). The idea of the project was to encourage the inhaler users to return their used inhalers to their pharmacies when they were picking up their new inhalers. As around 66% of respiratory patients visited their pharmacy at least every two months to pick up new inhalers or renew prescriptions, it was seen as an ideal opportunity for pharmacists to inform the users about the possibility to bring back their used inhalers for recycling (Anonymous, 2013a). After the initial pilot trial, the scheme officially started in November 2011, with the participation of several dozen community pharmacies across the UK, but very soon major pharmacy chains, such as *Boots*, *Co-op*, *Tesco* and *Superdrug* joined (Anonymous, 2013b). The scheme was supported by different pharmaceutical and pharmacy organisations, such as *The Royal Pharmaceutical Society* and *The National Pharmacy Association*, as well as some politicians (Anonymous, 2013c). Initially, it seemed that the scheme was successful, as approximately 2,000 pharmacies in the UK were involved in the project by 2013 and *GlaxoSmithKline* announced that they were considering the expansion of the project to other markets, such as the US, some EU countries and East Asia (Anonymous, 2012). In the first two years of the programme, the participating pharmacies have saved more than 170,000 inhalers from ending up in the landfills, preventing 1,216 tonnes of CO_2 entering the atmosphere (Kinloch, 2013).

However, after what seemed like an initial success, the project waned over time. Very few articles or any other type of information about the project is available after 2013, and those that are available basically just repeat what was already said before. In July 2020 the company announced that the scheme will be terminated in September 2020, without much further explanation. The company stated that they were proud that the scheme managed to collect and recycle around 2 million inhalers between 2011 and 2020, but offered no explanation why it was discontinued, to the disappointment of many participating pharmacists and customers (Clews, 2020). The company did not state why the project ended but the general understanding was that it was because the lack of funding (Macdonald, 2020), and that the funds were withdrawn because of the concerns about the efficacy of the programme.

Several studies were conducted following the termination of the 'Complete the Cycle' scheme to establish the efficiency of such projects, but those studies very much vary in results. For example, in these studies the percentage of returned used inhalers for safe disposal and recycling vary from 10% (Liatsikos et al., 2021) to 35% (De Vos et al., 2020), mostly influenced by the setting (whether the authors examined the numbers coming from either community or primary/secondary care pharmacies). Despite the fact that the 'Complete the Cycle' scheme had ended in such a way, it seems that there were many positive experiences coming from it, as many customers, inhaler users and pharmacists called for something similar to be established once again, but on a more structured level, possibly including the *NHS* as well (Murphy et al., 2023).

Following the theoretical considerations and the chosen research context and setting, this study proposed a following explorative model: 1) 'Complete the Cycle' sustainable project to collect and recycle inhalers was designed by *GlaxoSmithKline*, with the idea to animate their stakeholders to change their behaviour to be more sustainable; 2) Through the lens of the social influence theory, *GlaxoSmithKline* project engaged several social influencers in different capacities (approaches) – *GlaxoSmithKline* and their institutional partners (pharmacy chains and organizations such as *The Royal Pharmaceutical Society*) acted as 'public commitment makers' (Abrahamse & Steg, 2013; Young et al., 2017), pledging marketing, financial and logistical support for the project; On the other hand, pharmacists, who had the task to inform and motivate their customers, were assigned the roles of both 'block leaders' and the role of 'models' (Abrahamse & Steg, 2013; Young et al., 2017), as they were the ones whose personal contacts and reputation within their communities ought to have propelled the project success; 3) The success of the project depended heavily of several factors, both personal and contextual – whether the personality of chosen social influencers actually matched the task (motivation, values, commitment, etc.), whether the size of the targeted group was significant (for example, how many people used inhalers per one influencer pharmacist), whether there was a significant level of social cohesion within the group (was it a village, small town or a big city, did customers come to particular pharmacy regularly so they could establish personal contact with their pharmacist, do people in the community engage with other social issues and problems, etc.); 4) In the terms of the approach on how to disperse the social influence, the pharmacists were supposed to act interpersonally and face-to-face, while *GlaxoSmithKline* and their institutional partners ought to have acted via the mainstream and social media and also via direct advertising (website, posters, leaflets, etc.). This proposed explorative model failed in practice and this study is set to explore the possible factors of this failure, analysing it point by point.

5.3 Methodology

In this section the outline of the methodological approach to the research will be explained in detail, including the process of data selection, collection and analysis. The main theoretical considerations related to the ontological and epistemological suitability of the approach used is already presented in detail in one of the previous chapters (Chapter 4), so here it will only be shortly outlined. Starting from the theoretical positioning related to the concepts of social evaluation and social influence, this research represents a case study approach to examine how different stakeholders in the field of healthcare communicate and cooperate in the process of planning and executing an environmentally friendly project. The main methodological approach in the study is the one of qualitative content and discourse analysis of the different types of collected primary and secondary data, including interviews, media content, social media posts, internet forums, corporate materials and others.

5.3.1 Data selection and collection

The main methodological approach in this study is a case study. Its main characteristic is the opportunity of an intensive analysis of an individual unit, whatever that unit might be (Denzin & Lincoln, 2018). The case study approach is a sound methodological choice as the focus on the individual unit of analysis makes the research of high intensity, as it provides more detail, richness, completeness, variance and depth than cross-unit analysis. Also, it allows the collection and analysis of information about changes that happen over time and that are related to the interactions with the environment. The analytical process in case study approach is one of thematic content analysis (Bowen, 2009). Qualitative thematic content analysis relies on high-quality narrative data to provide enough information for meaningful and sound conclusions. Ideally, the data pool has to be very wide in scope, including many different accounts of the process, so everything that is relevant could be captured and nothing relevant omitted. This presumes that different types of sources should be used, focusing of the primary data (personal accounts and experiences of the people who had participated or had been involved in the process), but also secondary data, provided by second parties, who had also analysed and contemplated about the process. This particular research had the ambition to collect all the relevant accessible information, including everything that was available online as well as contacting and interviewing people who were involved in the project. Subsequently, a significant amount of data was collected and categorized before the qualitative analysis, as can be seen in the Table 5.1.

TYPE	DETAIL	UNITS
Semi-structured interviews	- Semi-structured. - Online. - Anonymized.	10
Media articles	- *Nexis* database. - All media types.	52
Social media announcements	- *Facebook*, *Twitter*, *LinkedIn*, *TikTok*, *Instagram*. - Anonymized.	2,000
Internet forum posts	- *www.pharmacy-forum.co.uk* - Anonymized.	24
Corporate material	- Annual and ESG reports. - Posters. - Leaflets.	10
Project website pages	- *www.completethecycle.eu* - via *Wayback Machine*	14

Table 5.1 – Data collected for the study

The main sources for the research were information provided by the participants. Despite the fact that the project was quite widespread, it was not easy to reach people who had personal experiences with it and who were willing to spare some of their time and effort to share their insights. First, during the process of initial scan for information, a vast number of media articles and social media platforms were scanned to establish the timeline and the general outline of the project. The *Nexis* database was searched used the terms “inhaler”, “recycle”, “recycling”, “*GlaxoSmithKline*”, “*GSK*”, “Complete the Cycle”, etc. This provided for 183 of media pieces of different types, including newswires, newspaper articles, website posts, radio and TV announcements, etc. It also provided for several hundred social media announcements, on platforms such as *Facebook*, *Twitter*, *Instagram* and *LinkedIn*. Some of these announcements had wide outreach and propelled a wider debate and some did not. In total, the number of relevant social media posts accounted for approximately 2,000 and they were all examined. When used in this research, social media data was anonymized and summarized. Using this initial data, people who had in some way been connected with the programme were identified and contacted for an interview.

Semi structured in-depth interviews are frequently used in any type of qualitative research project and methodologically it presumes a dialogue between researcher and participant, which is run with a guidance of a flexible interview protocol. Follow-up questions, probes and comments are then also used to expand the scope and validity of the data. This method allows the researcher to gather open-ended data, to explore thoughts, feelings and beliefs of the participants related to a particular topic and to have insight into personal and sometimes sensitive issues (Barriball & While, 1994; Kallio et al., 2016; DeJonckheere & Vaughn, 2019). Approximately 85 participants in the programme were identified by name. They were then approached via their social media platforms (publicly available). Out of 85 approached, 35 responded and 12 were willing to do an interview, while 23 stated that they did not know much about the programme and that they could not be of much help. Out of 12 interviews arranged, 10 interviews were conducted. Out of 10 people interviewed, 4 were pharmacists, 4 were inhaler users, one was employee at the recycling company, and one was the *GlaxoSmithKline* employee. The table with an overview of the interviews can be seen in Appendix 2. All the interviews were recorded and transcribed and the original recordings then deleted, while the transcripts are available via the *University of Leeds OneDrive* platform. The participants were anonymised, and they are referred to as participants A, B, C, D, etc. The interviews were semi-structured, and the questions differed related to what the role of the person in the project was, but the overall interview guideline, with questions that emerged from the theoretical considerations, was used, and it can be seen in the Appendix 3. Data saturation with interviews was reached at the point when first 10 interviews had been conducted, as the answers and the information provided by the interviewees were very consistent and in accordance with expectations, and additional interviews could only provide for details that are not essential for the study (Fusch & Ness, 2015).

As for the secondary data, approximately 2,000 social media (*Facebook*, *Twitter*, *Instagram*, *TikTok* and *LinkedIn*) and internet forum (*www.pharmacy-forum.co.uk*) posts were collected which referred to the 'Complete the Cycle' programme. Some of them were very informative about the programme itself but were also used to track down and contact the people who were involved in the project (Johnston, 2014; Schober et al., 2016). When these social media posts are referred to in this research, it is done in an anonymized way and in summarized fashion, in order not to expose the metadata of the people who made the posts. As for other types of media outlet data, when they were examined and when only relevant ones are kept for analysis, only 52 articles (press articles, online media articles, blog posts, etc.) in total were made public about the project in the entire period between 2011 and 2020, and that out of those 52 articles, only 2 were made by media of national or international significance (one newswire by *The Associated Press* and a feature press article in *The Daily Telegraph*, in which ‘Complete the Cycle’ was mentioned but was not the main topic). Other 50 media mentions were either by local media outlets (20 articles) or by professional media outlets (business, pharmaceutical, tech, health, etc.) – 30 articles. Finaly, available corporate and promotional material was collected, most notably corporate annual and sustainability reports, but also posters, leaflets and other promotional material. Utilizing the *Wayback Machine* (an online service that makes defunct websites available), the project website (*www.completethecycle.eu*) was also analysed. Promotional material can be seen in Illustrations 5.1 and 5.2.

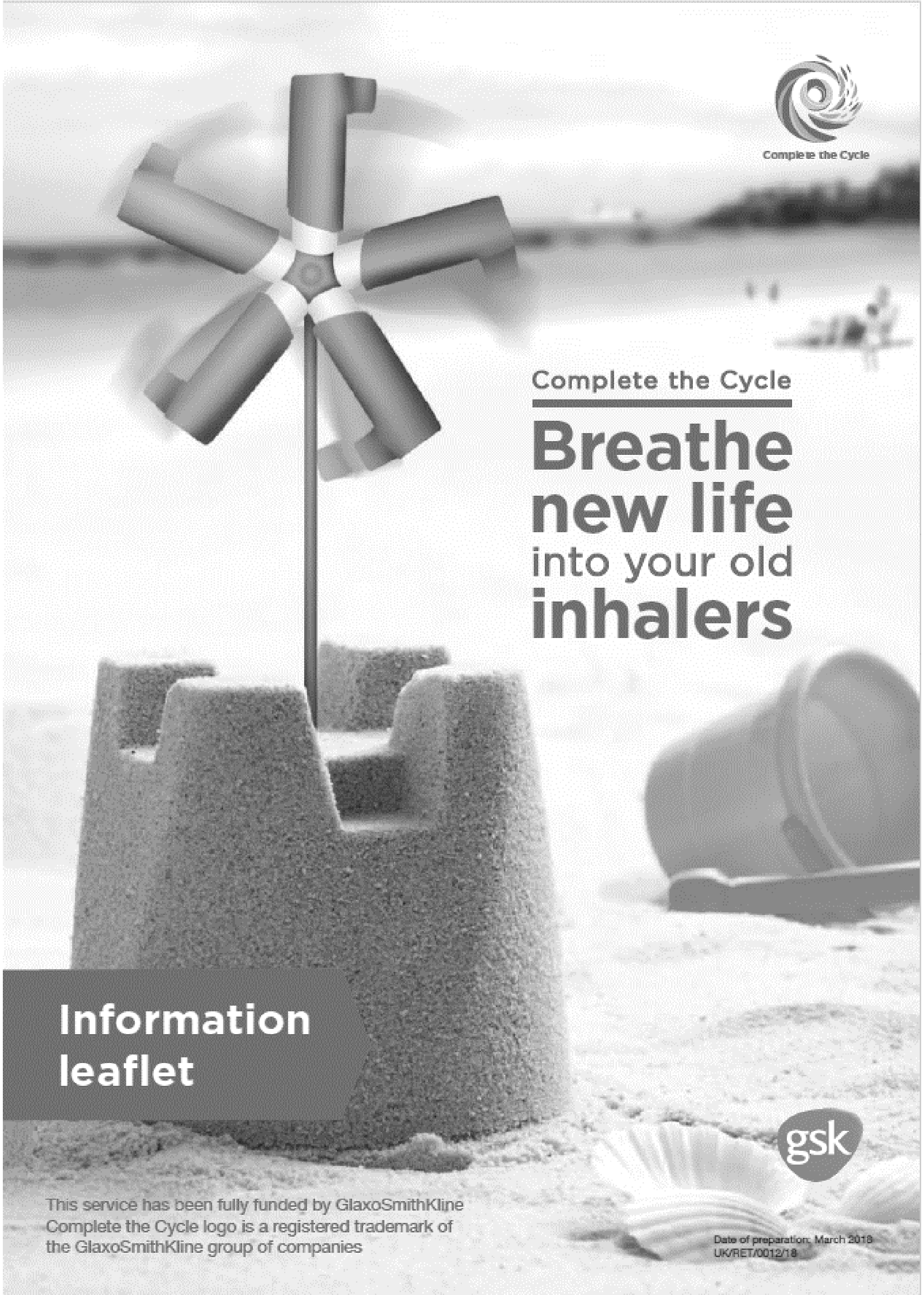


Illustration 5.1 – 'Complete the Cycle' information leaflet by *GlaxoSmithKline* (© GSK group of companies, all rights reserved)

Illustration 5.2 – A promotional poster for 'Complete the Cycle' project by *GlaxoSmithKline* positioned in one of the participating pharmacies (© GSK group of companies, all rights reserved)

5.3.2 Data analysis

After the collection and sorting of the data, the material went under the first round of examination, where some of the material (news articles) was deleted as it did not refer to the particular project that was examined in the study or as it represented duplicates. All the data was then uploaded to qualitative analysis software *ATLAS.ti* and sorted by their type (interviews, social media posts, media articles, etc.) and by other categories as well (by year, by outlet, by author, etc.), which made analysis and cross-referencing much easier. Using the qualitative analysis software ensures a standardised approach and guarantees more precision and general reliability of the analysis (Kaefer, Roper & Sinha, 2015). After the preparatory initial steps, the data was ready for the qualitative thematic content analysis.

All the data was then coded. The coding process consisted of two intertwined steps – 1) The coding that was the result of the original theoretical grounding of the study, where different codes related to the concept of social evaluation and social influence were created before the coding process itself (Harris, 1981; Potter & Edwards, 1996; Phillips, Lawrence & Hardy, 2004; Coulthard, 2014); 2) The open coding, where everything that seemed interesting and relevant for the study was coded as well (Strauss & Corbin, 1994; Locke, 2001). The process of coding was driven by the desire to find out what were the conditions that were either supportive or disruptive for the running of the scheme such as 'Complete the Cycle' (for example, some of the codes assigned were 'motivation' or 'lack of motivation', 'access to information' or 'lack of access to information', etc.). The examination of the first-order codes and their connection to establish the wider themes or categories (axial coding) followed and these second-order codes or themes are in detail analysed and presented in the following sub-section of the study, following the Strauss and Corbin (1990) approach, who suggest that researchers should utilise a coding paradigm, to include categories related to 1) The phenomenon under study; 2) The conditions related to that phenomenon (context conditions, intervening structural conditions or causal conditions); 3) The actions and interactional strategies directed at managing or handling the phenomenon and 4) The consequences of the actions and interactions related to the phenomenon.

5.4 Findings

The process of qualitative thematic content analysis of the wide variety of collected material, namely interviews with people who were either involved or were in touch with the 'Complete the Cycle' programme, but also media articles, social media and forum posts and other type of material, provided for answers asked at the beginning of the study. Because the chosen case study presents a project that did not succeed and was eventually discontinued, the findings are highlighting the potential reasons that contributed to that outcome. In this subchapter of the study those findings are presented in a following order: 1) Recognition of social influencers; 2) Issue of inherent motivation; 3) Influence of the contextual factors; 4) Lack of visibility; 5) Project complexity and information asymmetry.

5.4.1. Recognition and engagement of social influencers

One of the main findings, and certainly one of the most striking ones, is the severe limitation of who was seen or perceived as a social influencer in this particular setting. The project itself was set up in such a way to position the company (*GlaxoSmithKline*) as an enabler. Nick Lowen, commercial operations director at *GSK* stated: "As a company we want to champion and lead sustainability standards for the pharmaceutical industry. We are fully committed to finding innovative ways to increase our use of renewable materials and create less waste. The scheme is easy, liked by customers and gives people the chance to do their bit for the environment" (Anonymous, 2011b). From the company's perspective, the success of the project depended on whether the customers (inhaler users) did their bit. The company was the one that provided the funding, made the entire setup, hired contractors to pick up, collect and recycle the inhalers, and also provided basic advertising (printing and distributing promotional material, such as the posters).

However, when the company considered who was to be engaged in the capacity of social influencers, or who was to be the one to share and spread the message about the recycling scheme, the focus was completely on the pharmacists, and to some extent, to pharmaceutical and pharmacists' associations (*The Royal Pharmaceutical Society* and *The National Pharmacy Association*): "… community pharmacists are ideally placed to help reduce the impact of inhalers on the environment" (Munday, 2011). This obviously made sense as the main idea of the company was to use the vast network of local community pharmacies and employed pharmacists to convey the message and inform the customers about the scheme and the possibility to return their used inhalers; however the sole focus on pharmacists as social influencers almost entirely excluded other groups of people who had all the characteristics of possible social influencers suitable to be engaged in this project – environmentally concerned customers and local environmental activists.

By focusing solely on pharmacists to fulfil the role of social influencers, the project maintained the linear chain of engagement. This would have been fine if all or the majority of pharmacists did fulfil the assigned role, however, that expectation could be seen as unrealistic, as the capacity to serve as a social influencer depended on inherent traits and contextual circumstances (for example, whether a particular pharmacist was environmentally conscientious, or whether their workload allowed them to spare enough time to talk to their customers about the scheme). This is something that can be found as a reoccurring theme in conducted interviews and in analysed social media posts, as the users did not understand why their local pharmacies were not part of the scheme (Facebook user A, 2020; Facebook user B, 2020). Very often the customers who would otherwise be very interested to participate in the scheme complained that their local pharmacists never told them about it, even if their pharmacies did participate in the project, either because they did not care or because they were busy with their work-related tasks. The engagement of other stakeholders to serve the role of social influencers in promotion of the scheme could have expanded the outreach and mitigated the situations when the linear approach reached the dead-end.

5.4.2 Inherent motivation

For any person to do something or be engaged in a project, they have to be properly motivated. This motivation can be either external or internal. There are different ways to motivate people, either by punishment or by reward (Goldsmith & Goldsmith, 2011; Góis et al., 2019). As this project promised no tangible incentives for participation, the main motivation came from the inherent personal and societal values. Almost everyone will state that they care about the state of the natural environment. Or, at least, they will not purposefully inflict damage to it. Thus, vast majority of people would, in theory, be motivated to participate in something that helps the environment (Kaiser et al., 1999). Therefore, one can say that environmentalism is an inherent positive personal and societal value. However, for someone to work for or be engaged in a project that takes up time and energy, the level of their motivation has to be quite high, and, as there are no outside incentives, this means that their values have to be very strong. This was certainly true for people and organizations who were supposed to act as social influencers in this project. Thus, the success of the project assumed that the critical majority of engaged pharmacists would have had a strong inherent sense of motivation (and thus very strong environmental values). In practice, this was not always the case. For the majority of pharmacists, the contextual and operational difficulties related to the scheme outweighed their enthusiasm.

The same way the motivation and the strength of the environmental values of the pharmacists were overestimated, the motivation of the inhaler users and local environmental activists were underestimated. There are many testimonies that inhaler users would not throw away they used inhalers in the bin and that they were actively trying to find possible solutions for the problem, way before the scheme was set up: “I live in north London, where there’s an enormous amount of interest in getting people to recycle everything. So, I recycle glass and paper and leftover food and waste packaging and then I thought about what could I do with my inhalers […] I’ve had inhalers for years, and I was just thinking it was horribly wasteful […] So, I was just collecting them in the house. But you’re going to have to do something with them at some point” (Participant A, 2024). They would collect their used inhalers in a box and saved them until they managed to find a way to safely dispose them or recycle them. Sometimes they would drive for miles trying to find a pharmacy that would take their inhalers. Very often they would organise with other inhaler users and collect theirs for safe disposal. The lack of communication between the project developers and managers, which was the result of the fact that highly motivated stakeholders apart from pharmacists were not considered for the role of social influencers, resulted in a wasted opportunity to spread the outreach and diversify the base of people potentially interested to participate in the project. Ultimately, this led to both the sense of frustration and practical limitation of the programme’s potential.

5.4.3 Contextual factors

What seems to have emerged as a very significant obstacle in the process of the implementation of the programme were contextual barriers that came from the very nature of the process of interaction between the pharmacists and the inhaler users, especially in settings that were not community-pharmacy settings (for example, clinical settings such as hospitals). And these contextual difficulties hindered the full potential of expression of the motivation of both pharmacists and the inhaler users. What looks odd is that it seems that these contextual barriers had not been taken into full account when the programme was devised. The project was described as “simple yet effective service” (Anonymous, 2011c) and “easy” (Anonymous, 2011b), but for pharmacists it consisted of much additional work, as they had to prepare the boxes for collection, to talk to inhaler users about the project and explain them what to do (or write them an email explaining all that), they had to separate collected inhalers and handle the collections until picked up by recycling contractors, etc. (Facebook user C, 2019).

For pharmacists, the main contextual obstacle for the implementation of the scheme was the overall workload they were exposed to. If the community pharmacy that was involved in the scheme was located in a smaller or quieter part of the country or a town, with lower visiting frequency, the pharmacists would usually have enough time and energy to commit themselves to the cause. On the other hand, in most cases it was completely the opposite. One of the interviewed inhaler users stated: “They [the pharmacists] were happy to receive the inhalers, but it seldom led to a conversation – partly because my local pharmacy is extremely busy, and there’s always a long queue of people waiting, so no time for longer conversations” (Participant B, 2024). As the scheme was devised in such a way to almost exclusively burden the pharmacists, they very often felt exhausted and sometimes even aggravated with this additional work, which certainly led to their inefficiency and the overall decline in the effectiveness of the project (Facebook user B, 2020).

When it came to the inhaler users, the main contextual difficulty to engage with the programme was related to whether their setting was community or clinical one. People who use inhalers are people who suffer from pulmonary problems. If their condition was acute and they were treated in a clinical setting (such as the hospital), and then visited the clinical pharmacy, where they were usually not able to respond to the initiative presented to them by the clinical pharmacists, as they either did not plan the visit so they did not bring their used inhalers (and because of their acute state they were unlikely to visit it again), or because they were too stressed out because of their condition to pay full attention or even be able to focus on an issue that seemed irrelevant comparing to their immediate health problem: “I mean, being in base in the hospital with our patients when they come into hospital as an acute admission or whether they’re coming to clinic. And probably at both situations where I see those patients, it’s very difficult to say: “Well, we can recycle your inhalers?” “Well, actually, I haven’t brought them with me”. So, it’s that community setting I think would be the bigger one” (Participant C, 2024). The similar logic applied to other settings as well. The willingness to be engaged in the project was related to the severity of the condition and for how long people used inhalers. If their condition was of more recent date and they still have not had time to adjust to the reality of living with a serious pulmonary condition, the inhaler users would find it difficult to see beyond their condition and overlook the other aspects of the situation (such as the environmental one). With the passing of time and with better accommodation to the situation, people tend to organize their lives in such a fashion that their other concerns and interests become integral part of their new lifestyle. People who have used inhalers for a longer period of time and who developed a routine, with regular check-ups and visits to the pharmacy, tended to be more conscientious and more engaged with the programme (Facebook user D, 2019).

5.4.4 Lack of visibility

One of the biggest problems of the ‘Complete the Cycle’ scheme was its lack of visibility. To some extent, the very idea that the project would be based on direct contact and communication between pharmacists and their customers assumed that advertising and marketing would be of less concern, as the pharmacists would serve as social influencers and spread the information about the project word of mouth. However, the programme could only be successful if the response and the turnout were massive, in which case it would make sense to support the project and the pharmacists with other possible promotional avenues. The analysis of different ways people had found out about the project pointed out to the fact that other means of advertising were completely inadequate. This is something that both the pharmacists and the inhaler users pointed out, and it could also be found in the media outlets as well: “The pharmacies are promoting the program but are still waiting for participants. I don’t know if word is getting out” (Mccandless, 2012).

The examination of different media outlets via *Nexis* database (searching with keywords such as “inhaler recycling”, “Complete the Cycle” and “*GlaxoSmithKline*” and “*GSK*”) showed that only 52 articles (press articles, online media articles, blog posts, etc.) in total were made public about the project in the entire period between 2011 and 2020, and that out of those 52 articles, only 2 were made by media of national or international significance (one newswire by *Associated Press* and a feature press article in the *Daily Telegraph*, in which ‘Complete the Cycle’ was mentioned but was not the main topic). Other 50 media mentions were either by local media outlets (20 articles) or by professional media outlets (business, pharmaceutical, tech, health, etc.) – 30 articles. In those 52 media articles, ‘Complete the Cycle’ project featured as a main news in 36 and as a side mention in 16. When we consider that project lasted for almost 10 years, with participation of approximately 2,000 pharmacies across the UK and engagement of thousands of pharmacists and inhaler users, the overall number of media articles seems very low.

The very low number of media articles dealing with the scheme suggests that the company, as the main instigator of the programme, did not engage their full capacities to spread the word about it. Supporting this conclusion is the fact that the examination of the press releases available on the website of *GlaxoSmithKline* for the period 2011-2020 fails to find a single press release about the project. Also, when it comes to media promotional activities, the company seemed to recycle the material they supplied to the media outlets. For example, one specific statement, word to word, could be found in several different media articles and it was contributed to different people: “I’m delighted to be able to offer this simple yet effective service to my customers and believe together we can make an important difference to our environment. As a responsible and ethical business, it is important to take a lead in sustainable initiatives like these” (Anonymous, 2011b; Anonymous, 2011c; Anonymous, 2011d;).

Other promotional avenues were inefficient as well. Regarding social media, both the output and outreach were almost non-existent. For example, the company only published 5 *Facebook* posts about the programme, with those posts having several dozen likes in total, as can be seen in the Illustration 5.3. The same goes for other social media outlets, such as *Twitter*. Engagement on social media outlets was slightly higher with posts published by other people or organizations that informed their followers about the project, but the total engagement was not much higher. Other promotional activities were also insufficient, and sometimes devised in such a way that it was very difficult for people to understand what their point was. For example, to mark the successful start of the project, *GlaxoSmithKline* had installed a giant green inhaler sculpture at London’s Victoria Station. The installation was announced via *Facebook*, but in the comments sections many people stated that they did not understand what the point of it was, as inhalers are not green. The company social media team then had to explain that “… inhalers come in all sorts of colours, including blue, tan and purple and that in this case, we chose green to reinforce the recycling message” (GSK, 2013).

Illustration 5.3 – Facebook post by *GlaxoSmithKline*, announcing the start of the scheme with an artistic installation in London (© GSK group of companies, all rights reserved)

Two advertising avenues were slightly more efficient. The first one was an official website of the programme (*www.completethecycle.eu*), now dysfunctional but with some features still available to see via the *Wayback Machine*. The website itself was very functional and easy to navigate and provided for lot of useful information. Especially popular and useful feature of the website was the participating pharmacy finder option, which the inhaler users could use to track the nearest participating pharmacy, using their postal code. Many inhaler users shared information they obtained via this website on social networks and specialized internet forums. Although there were problems with the website too (for example, inaccurate information provided – the website would state that the particular pharmacy participated in the project but in reality, it did not and vice versa), it was probably the best and most efficient way the company managed to communicate with inhaler users.

The second relatively efficient way the company had managed to communicate with their stakeholders about the programme is via posters and leaflets. *GlaxoSmithKline* supplied the participating pharmacies with printed posters and leaflets (about 20 or so posters per pharmacy), and the pharmacy employees would exhibit those posters in the prominent spots within the pharmacy. Both the posters and leaflets were concise and informative and, according to the testimonies of both the pharmacists and the inhaler users, helped them a lot, especially in order to save time as the inhalers users could obtain the detailed information without pharmacists having to explain things in person. Finally, one important feature of these two avenues of communication is that they were the ones that clearly associated the inhaler recycling scheme with *GlaxoSmithKline* company, with the name of the company and the logo prominently displayed. However, despite this, the company failed to make an association with the project. When asked about whether they knew that *GlaxoSmithKline* was instigator of the 'Complete the Cycle' programme, the majority of inhaler user interviewees stated that they did not.

5.4.5 Overall project complexity and subsequent information asymmetry

Finally, one of the reasons that contributed to the project's eventual discontinuation was the fact that it was, in a way, very complex and involved many people and organizations performing very specific tasks. This is not necessarily a prerequisite for failure, but when complexity is combined with disrupted lines of communication and all the other conditions and variables that were already mentioned in the study, the complexity adds to information asymmetry, which subsequently adds to frustration and discouragement for participation.

One of the issues previously mentioned that very much contributed to the confusion about the project was which pharmacies actually participated in it and thus to which pharmacies the customers could bring their used inhalers. The pool of participating pharmacies was quite big, including small and independent community pharmacies, but also big chains, such as *Tesco*, *Co-op* and *Superdrug*. One of the problems with smaller community pharmacies was that they collected very few inhalers, thus their participation was economically not viable. Thus, such small community pharmacies very often dropped out of the scheme. As their status changed, the inhaler users either did not know about this or were left without the option to recycle. Also, this is the reason why the information about participating pharmacies on the official website were often inaccurate. Some of the inhaler users tried to organise to overcome this obstacle, so, for example, several people would collect used inhalers and when somebody travelled to an area with an operational collecting point, they would bring their inhalers along and dropped them off. However, the majority of people, who did not have such an enthusiasm, simply gave up.

Another big issue that emerged as quite problematic was what actually happened with the inhalers once they were collected at the pharmacies. This part of the project was not very well explained by the company and even the pharmacists had trouble understanding this, and when they were asked about this by the inhaler users, they did not know how to respond. For a very long time, the pharmacies have been engaged in projects to collect unused medicines for their safe disposal, as throwing away active chemical substances to landfills or waterways represented a substantial danger to natural environment and the maintained possession represented a danger for people as well (in the case of misuse or abuse). But in such cases the medicines were safely disposed of or destroyed. When asked what would happen to the returned inhalers, nobody could actually tell if they were to be recycled or incinerated. Depending on the type, some could be recycled and some not. But very often the pharmacists were not able to give a clear answer to the customers. For some, the discovery that their inhalers are not going to be recycled but burned felt like disappointment. Some even felt they were tricked and that their effort was not appreciated. With some people this led to resentment and their withdrawal from participating in the project.

5.5 Discussion

The case study of the 'Complete the Cycle' project, in a very specific research setting of joint multi-stakeholder sustainable transformation project conducted by a pharmaceutical company in association with various partners, and the following qualitative thematic content analysis conducted in the study, provided for the findings that shed more light on conditions that mitigate the success (or failure) of such initiatives and the overall significance social influencers can have in such projects. In this sub-section of the study, the findings are discussed in relation to the theoretical considerations made at the beginning. In the *Discussion* the focus is on the issues of proper identification and engagement of adequate social influencers for the chosen task, on personal characteristics of social influencers and on contextual factors that have the power to either resonate or suffocate the initiative (and thus influence whether the proper decisions in choosing social influencers were made), and, finally, on the mechanisms that were used (or missed to be used) in the process of the project implementation, which subsequently influenced all the previous points.

The first significant finding of the study is that the *GlaxoSmithKline* company did not fully explore all the possibilities when deciding about who to choose as their social influencer partners for the implementation of the project. The project itself did not seem to be the result of consultation with other stakeholders, but rather a result of a somewhat narrow understanding that the company should be more engaged in the tangible reduction of its negative environmental impact: "We recognise that as our business continues to grow we need to continue our efforts to reduce waste that our sites generate. We have identified which sites are responsible for generating the majority of our waste and in 2014 we will have an increased focus on developing and implementing improvements […] to our established programme to reduce waste […] *GSK*'s inhaler recycling programme, 'Complete the Cycle', encourages patients to return their old inhalers to participating pharmacies, which are then sent back to us to be recycled. Not only does this reduce waste sent to landfill, it also prevents the remaining propellant in used inhalers being released as greenhouse gases, as we collect it when crushing the cans to recover the aluminium". (GSK, 2014, p. 66).

Thus, the company developed a project in which all the planning and financing rested on the company's shoulders, which is by itself not very much in accordance with the principles of successful multi-stakeholder projects, where other stakeholders should be consulted and engaged in all the steps of the process (Moser, 2010; Adomßent & Godemann, 2011; Newig et al., 2013; Young et al., 2015; Crane & Glozer, 2016; Barendsen, Muß & Silvius, 2021; Viglia et al., 2023). However, the nature of the project was such that the company could not run it by itself. Seeing themselves as 'enablers' or 'catalysts' (initiating change, giving strategic direction, influencing leadership, tracking organisational performance and having a big-picture perspective) (Visser & Crane, 2010), the company heavily relied on their partners to actually implement the project on the ground. Subsequently, *GlaxoSmithKline* and their institutional partners (pharmacy chains, *The Royal Pharmaceutical Society* and *The National Pharmacy Association*) assumed the social influencer role and acted as 'public commitment makers' (where community or social circle members publicly pledge to engage in sustainable behaviour because of the need for consistency and maintenance of social pressure; see e.g. Cialdini, 2001; Abrahamse & Steg, 2013; Young et al., 2017), pledging marketing, financial and logistical support for the project.

In such circumstances, the choice of partners to act as the agents of social change and social influencers who would convince and encourage the customers to engage in more sustainable behaviour is crucial, because the action itself will have more chance of success if the sustainable transformation information is provided by someone who belongs in their customers' social network (Abrahamse & Steg, 2013). Considering that the strong ties in the network are more likely to push the social influencers to provide the information that will have an effect on changing the behaviour (Goldsmith & Goldsmith, 2011), the programme chose pharmacists and pharmacy technicians to act as the bridge between the company and the inhaler users, planning for them to assume the role of 'block leaders' and the role of 'models' (people or organizations who are already engaged in sustainable behaviour to encourage people and organizations from their social network to follow their example and do the same; see e.g. Weimann, 1994; Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013; Young et al., 2017), as they were the ones whose personal contacts and reputation within their communities ought to have propelled the project success.

This choice was sound, because all the existing data show that generally pharmacists tend to form strong connections with their customers. For example, over one quarter (29%) of people in the UK state that they contact or visit a community pharmacy, either for themselves or someone they care for, at least once a month and that pharmacy users in the UK tend to be habitual in their choice of pharmacy as nearly three quarters (71%) state they use the same community pharmacy each time. This is most commonly a small chain or independent pharmacy (42%), followed by large or medium sized chain pharmacies (36%) (Duxbury, Fisher & Jeffreson, 2023). As the vast majority of inhaler users are managing a chronic health condition, it is more likely that they will develop a habit to pick up their new inhalers at their community pharmacies, thus providing an opportunity to establish a long-term connection and regular communication, in which the community pharmacists and pharmacy technicians could then exercise their power of social influence as 'block leaders' and 'role models' on the customers (Back, 1951; Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013; Young et al., 2017).

However, both personal and contextual circumstances heavily influenced both the pharmacists and the customers in their ability to be fully engaged in the communication regarding the sustainability project (as shown by another finding of this study and discussed in the next paragraphs), which significantly narrowed the possibility of social influencers to act as such and fully engage in interpersonal and face-to-face communication, characteristic (and most efficient and successful) for 'block leader' and 'modelling' approach to social influence (when someone presents a personal example of how to engage in sustainable behaviour, as people and organizations are more likely to commit to a certain behaviour if they see others engaging in it; see e.g. Young et al., 2017), which, in turn, heavily affected the efficiency of the programme (Abrahamse & Steg, 2013; Young et al., 2017). As the chain of communication regarding the programme was designed to be somewhat linear (the company – pharmacists ('block leaders' and 'role models') – customers), the disruptions in this chain led to the breakdown of communication and drop in engagement. This development strongly suggests that any multi-stakeholder project that relies on social influencers should in fact favour the truly multi-stakeholder approach, where more potential social influencers should be identified, and the linear chain of communication actually transformed into multi-stakeholder matrix of communication, collaboration and cooperation (Visser & Crane, 2010; Viglia et al., 2023). In the particular 'Complete the Cycle' project, it is identified that local environmental activists (both inhaler users and those who do not use inhalers) were very much motivated to act as 'block leaders' and 'role models' and providers of information and mobilisers within their communities (Tindall & Piggot, 2015; Owen, Videras & Wu, 2010; Visser & Crane, 2010; Goldsmith & Goldsmith, 2011), but because they were not recognized as such by those who designed and implemented the programme, they were left out of the communication and thus their positive impact on the project was limited.

Another important finding of this study is that the project seemed to fail to take into account all the circumstances that had the potential to reduce participants' willingness to fully commit to the cause, which significantly diminished the project efficiency (Abrahamse & Steg, 2013). This circumstances equally affected the pharmacists and pharmacist technicians as social influencers, but also the inhaler users (or customers), as the primary target whose behaviour ought to be changed. 'Complete the Cycle' programme assumed that both the social influencers and the target audience operated almost as perfect theoretical types. The assumption was that everybody cares enough about the environment that they will engage in a sustainable change of behaviour if provided information about it and if provided the outlet to do so (Kaiser et al., 1999). This approach did not sufficiently take into account different circumstances that inevitably mediated one's willingness and motivation to actively be the part of such a scheme (Visser & Crane, 2010; Abrahamse & Steg, 2013). These circumstances differed, and they were either personal or contextual. Personal circumstances and characteristics (cognitive, emotional, philosophical, etc.) very much related to the strength of one's motivation to be part of an environmental initiative (Kaiser et al., 1999; Visser & Crane, 2010; Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013). Although all the interviewees stated that they were very much interested in environmentalism, they also stated that they had interactions with actors who did not seem to share their enthusiasm, at least on the practical level. Many simply could not be bothered by the entire scheme, while others expressed despondency, for example inhaler users who did not believe that their engagement would make any significant impact or even the ones who did not believe that the inhalers would be recycled at all. Thus, although it is true that people generally care about the environment and that environmental preservation and sustainable transformation are positive and desirable social outcomes (Shields, Šolar & Martin, 2002; Raymond et al., 2019; Linnér & Wibeck, 2020), it should not be taken for granted that all the people are willing to engage in the process, especially when it comes to investing personal time and energy.

Another important condition that affected the project was the context in which the interaction between the pharmacists and pharmacy technicians (social influencers) and the target audience (inhaler users) occurred. For example, in a clinical setting, where inhaler users communicated with pharmacists whose pharmacies were part of a clinic or a hospital, the users were distracted from the possibility to think about the recycling of their inhalers because they were emotionally impacted by the acute state of their condition to think about anything else. If their visit to a clinic pharmacy was not planned and was the result of the acute health incident, they were not emotionally or in any other way prepared to think about something that in that particular moment did not have much significance to them. Although this contextual obstacle is less prominent in the community pharmacy setting, it was still visible. For example, all the inhaler user interviewees who stated that they were interested in the negative environmental impact of their inhalers and who were willing to do something about it were people in chronic state and who had been managing their pulmonary conditions for a longer period of time. Being accustomed to the health condition and the nature of the treatment allowed people to stabilize their emotional state and structure their response to it, which allowed for other concerns apart from immediate health related worries. When it comes to pharmacists and pharmacy technicians (social influencers), much of their ability to engage in the scheme and provide for information and support depended on whether they actually had time and energy to do so. As the interaction with customers required time and energy, sometimes, and quite often actually, their ability to do so was conditioned on how busy they were with their main tasks. The fact that pharmacists and pharmacy technicians were already very heavily burdened, and with this burden steadily increasing with new services available through pharmacies (Duxbury, Fisher & Jeffreson, 2023), many of the pharmacists simply rationalised and naturally prioritised service that was their main job.

The decision to focus solely on the linear communication avenue that prioritised the work of pharmacists and pharmacy technicians as social influencers led to the neglect of other possible avenues of communication, which ultimately led to the fact that the programme itself remained largely unknown to its intended audience, the inhaler users. This is mainly because the company seemed to neglect the potential of the media, both the established and legacy media outlets such as newspapers, radio and television, but also new social media outlets as well (Newton, 2021). From the perspective of the social influence theory, the actors who were engaged in process as 'block leaders' and 'role models', would most efficiently utilise the interpersonal approach and face-to-face communication (Abrahamse & Steg, 2013; Young et al., 2017). However, it has been established that the social media is rapidly and successfully substituting face-to-face communication (Bond et al., 2012; Etter et al., 2018) and that many people actually consider communication via social media as a face-to-face type of interaction (and when it comes to sustainability, social media affects pro-environmental behaviour mainly by strengthening the effects of interpersonal communication) (Han & Xu, 2020; Martin & MacDonald, 2020).

On the other hand, the social influencers who assumed the role of 'public commitment makers', should have somehow proceeded to actually inform the public about their commitments (Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013; Young et al., 2017). The company counted on 'block leaders' and 'role models' to spread the word, but they failed to act decisively on the matter themselves. As far as this study was able to track the corporate activity related to this particular project, there were no press releases that were made specifically to promote it. No national media outlets had picked it up, and the only promotional activity was seen with local media outlets and newspapers, whose role in community engagement can be important, but is still very much limited, especially in reach (Radcliffe, 2012). Another missed opportunity was the lack of promotion of the official project web site, which proved to very popular with people who were interested to engage in the project, especially the feature that would show the participating pharmacies on a map if the interested party entered their postal code. However, even the website was promoted by the people who were already interested or participating in in the project, and not the company. The very name of the website made no association between the project and the company (*www.completethecycle.eu*).

Even the promotional material that was distributed to pharmacies to inform the inhaler users about the scheme, such as posters and leaflets, failed short to have bigger impact, especially regarding the association of *GlaxoSmithKline* with the project. With posters and leaflets the role of the company in the was a bit clearer, as the material explained that the programme itself was designed and supported by *GlaxoSmithKline*, including displaying the company logo. But overall, the information that the *GlaxoSmithKline* company was behind the project remained almost completely undetected by the inhaler users. It is not a piece of information that was distributed by the pharmacists to inhaler users, because it was not crucial for the success of the project, and it is also something that was easily omitted, especially if the communication is restricted. Very few inhaler user interviewees had any idea that *GlaxoSmithKline* was behind the scheme. This might not be crucial for project success, but it was important because if the company efforts remained unknown, the company failed to reap the reputational and other benefits of staging a sustainable initiative (Bhupendra & Sangle, 2015; Wijethilake, 2017).

The inability of the company to establish efficient lines of communication between the involved stakeholders resulted in the state of the information asymmetry

(Deephouse, 2000; Graf-Vlachy et al., 2020), which ultimately led not just to the exclusion of the many potential participants who were simply uninformed about the project, but also to the feeling of frustration and even dispiritedness of the people who were involved or who had expressed willingness to participate. As the inhaler recycling process itself was quite complicated (because of different materials, out of which some were not suitable for recycling), the lack of information about it caused some of the people to feel disappointed, especially when, for example, their main source of information – the pharmacists – were not able to answer their questions, as they did not know the answers themselves. When they were advised to read the leaflet or visit the web site, some protested that it was too much required effort. The same went when some of the active participants who retuned their inhalers realised that their inhalers were not recycled, but safely disposed of (incinerated). Some even felt they were tricked.

Overall, the study firmly established several theoretical and empirical points that are important for the general research. First, it is proven that pharmaceutical companies are very much unknown to the wider public, even to their customers, especially regarding non-essential matters such as sustainability. Furthermore, it is proven that it seems to be very difficult for pharmaceutical companies to establish operational contact with other stakeholders, even in multi-stakeholder sustainable projects. Inclusion of the stakeholders in the process of designing, planning, implementing and overseeing the project might have improved its efficiency, provided for better role assignment, choice of approach, dissemination of information and, subsequently, better response. Second relevant finding is that establishment of communication channels between the companies and their stakeholders (primarily customers, but eventually the general public too) requires the mobilization of a wide coalition of actors who are interested in sustainable change, rather than focusing on a single actor to act as socials influencers. Finally, the lack of media coverage substantially hinders the success of the sustainable transformation programmes, not just because media disseminate information, but also because there is a potential to see the media as an interested actor in the process, thus a potential social influencer. The media can act in such a capacity themselves, as one of their societal roles is to act as social evaluators (Norris, 2000; Lang & Lang, 2009; Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017; Barkemeyer, Givry & Figge, 2018; Roulet & Clemente, 2018), especially if the programme is of high societal significance and carries high ethical value (and sustainable transformation programmes are). By including the media into the coalition of interested stakeholders, in any possible capacity within the social influence theory framework ('public commitment making', 'block leadership, or 'modelling'), sustainability projects would get more coverage thus better engagement, and also an important relief of other participating actors, who would have to worry less about the dissemination of the information and focus on their main responsibilities within the project.

6. Chapter 6 – Study 2 – Media framing of sustainability: The case of British pharmaceutical companies (2000-2020)

6.1 Introduction

The need for more sustainable modes of production and consumption is generally undisputed today and is enshrined in major normative policy agendas such as the UN Sustainable Development Goals (SDGs) and the Agenda 2030. The UN SDGs in particular represent prominent and well-stablished framework for balancing economic, social, and environmental development and inclusion of all the stakeholders' perceptions and needs into long-term developmental strategies (Sachs, 2012; Fonseca et al., 2020). Sustainability challenges such as climate change, biodiversity, forced labour or gender equality have become headline news (Barkemeyer et al., 2018); investors are increasingly paying attention to environmental, social and governance (ESG) information and feed it into their decision making (Amel-Zadeh & Serafeim, 2018); and consumers are increasingly factoring in social and environmental criteria in their everyday purchasing decisions (Young et al., 2010). These developments tally with a wider policy context in which governance for sustainability relies heavily on voluntary, market-based mechanisms (Daley, 2007; Pirard, 2012; Von Geibler, 2013). Norms and constructs such as the CSR business case, cross-sector partnerships and multi-stakeholder initiatives, or the win-win paradigm underpin large parts of the governance landscape (Vogel, 2005). Stakeholders of the firm occupy a pivotal position within these mechanisms. In particular, this applies to conscious consumers in that they are expected to reward or sanction companies and products based on market signals as well as social and environmental performance attributes (Redclift, 2005).

One peculiar challenge in this context is that stakeholders commonly cannot access, let alone process, a multitude of sustainability performance-related information directly. Instead, they have to rely on 'infomediaries' (Deephouse & Heugens, 2009) who select, synthesize and process relevant information and oftentimes provide social evaluations based on this information, with the aim to guide the general public (George et al., 2016a). The market for social evaluations is rapidly growing and increasingly heterogeneous, with an emergence of different actor groups and communication channels catering to diverse audiences and stakeholder groups, including ESG rating agencies (Berg et al., 2022), traditional news media (Clemente & Gabbioneta, 2017) or social media (Etter et al., 2018). Even though the mass media landscape has become increasingly complex in recent years, not least with the advent of social media, broadsheet newspapers continue to be of particular importance with regard to presenting sustainability-related aspects to the wider public. Among others, this importance stems from their reach and scope as well as credibility, their comparatively high agenda-setting impact on policymakers (Carvalho & Burgess, 2005), and their role as 'intermedia agenda-setters' (McCombs, 2004), in turn shaping the news content of other media such as radio and television news or tabloid news coverage.

A well-developed body of agenda-setting research has long established key determinants of the relationship between the mass media, the general public and the policy agenda (Downs, 1972; Baumgartner & Jones, 1991; Dearing & Rogers, 1996). Building on Cohen's (1963) agenda-setting hypothesis, it is widely acknowledged that the mass media play an important role in setting the public agenda; this is commonly referred to as first level agenda-setting (McCombs, 2004). Somewhat more recently, research has started to explore what is called second level agenda-setting, that is, the tone, framing or priming of media issues. What is important in this context is that the mass media are not merely restricted to passive information transmission. Instead, they assume multiple roles, for example that of a public forum, of a mobilizing agent and of a watchdog (Norris, 2000; Barkemeyer et al., 2018). A range of factors impact how news coverage is filtered out and presented, including journalistic norms such as novelty or balance, ownership structure (Roulet & Clemente, 2018), or the editorial policy and target audiences (Briggs & Burke, 2009; Barkemeyer et al., 2020) of any given outlet.

Yet, despite their critical relevance in this context, the role of the mass media in the formation of corporate sustainability (CS) related public opinion remains poorly understood. Extant research in this field has largely focused on corporate disclosures and press releases, third-party accounts including non-governmental organizations and rating agencies or, more recently, social media (Holt & Barkemeyer, 2012; Fischer et al., 2017; Kang, 2019). Hence, there is an urgent need to better understand how sustainability performance attributes are selected, prioritized and presented by the mass media as the missing link between corporate sustainability performance and public opinion. This is particularly important in the context of corporate sustainability given the broad, intertwined and elusive character of sustainability, constituting an essentially contested concept (Moon, 2007) in the sense that sustainability may carry very different meanings for different actors.

This is the research context in which this study is positioned, as it explores sustainability-related media representations of two large UK-based pharmaceutical companies over a 20-year period. The pharmaceuticals industry represents an extreme case in that direct communication between the pharmaceutical companies and the general public is almost non-existent, the public knows very little about the industry and its (sustainability) performance, and the general public only learns about sustainability in a pharma context from the media (Rowe, 2013). The objectives of the study are twofold: first, it explores first-level agenda-setting – on the basis of salient sustainability-related issues reported by the media – centred on the two pharmaceutical companies. Second, within the same empirical context, it explores second-level agenda-setting and contextualization of these sustainability issues into dominant media frames and general knowledge. The main finding is that over time the general interest of the media about sustainability issues grew, but not consistently. Also, it reveals that the emerging media discourses tend not to be focused on the companies' environmental performance but on socioeconomic and political issues, related to their core business – development of medicines, their availability and price, companies' value-creating business models and long-term economic resilience, their strategic positioning in UK business landscape and creation and maintenance of fruitful partnerships.

This study, as a part of a wider research effort, contributes to the knowledge on media framing as it explores the framing of infomediaries in a specific context – as the missing link between corporate discourse and public opinion on corporate sustainability. Second, it contributes to the sustainability studies as it explores a complex notion of sustainability in a very specific context – a specific industry with specific weight, importance and relationship with its stakeholders. Finally, in an empirical sense, it contributes to the understanding of the pharmaceutical industry, which is still rather underdeveloped, especially related to sustainability.

The remainder of this chapter is structured as follows. In the next section, the theoretical foundations of the study are discussed, with focus on the concepts of sustainability and corporate sustainability, their conceptual and semantic ambiguity and the need for them to be explored from the multi-stakeholder perspective. It also analyses the media agenda-setting and framing literature, trying to understand how the mass media assume their roles of social evaluators and influencers, act as infomediaries and influence the public opinion by determining the salience of certain topics and problems and framing different issues and problems. In the next section, it discusses the research context – the specificities of the pharmaceutical industry, and also the methodological approach, including the data collection and analysis. In the *Findings* section, results of the qualitative analysis are presented – the observed emerging media frames. In the

Discussion section, findings are discussed in light of the extant literature examined in the Theoretical considerations section.

6.2 Theoretical considerations

In this section, the most important theoretical concepts that are relevant for the research are outlined – the concepts of sustainability and sustainable development, their complexity and ambiguity; the corporate sustainability as a business perspective on the former; the stakeholder theory as an important facet to explain the corporate social engagement; the agenda-setting and framing powers of the mass media are analysed in more detail, as they are seen as a way to influence the public opinion and create the common knowledge about sustainability related to particular companies or industries. The literature review is not systematic, but a result of the extensive examination of the existing literature and the accumulation of useful references in the published seminal papers.

6.2.1 Sustainability, corporate sustainability and the stakeholder perspective

Sustainability is one of the most important issues of the modern world and it entails a range of 'grand challenges' (George et al., 2016b) the humanity faces today. Sustainability grounds the human development debate in a global framework, within which a continuous fulfilment of human needs is one of the ultimate goals (WCED, 1987). However, sustainability is semantically, theoretically, and practically ambiguous and different people and organizations understand it differently (McKenzie, 2004). Sustainability is very often understood and perceived intuitively but expressing it in the concrete and operational terms remains a challenge (Briassoulis, 2001; Labuschagne, Brent & van Erck, 2005).

In the business sphere, the corporate sustainability can be defined as meeting the needs of a firm's direct and indirect stakeholders without compromising its ability to meet the needs of future stakeholders (Dyllick & Hockerts, 2002). Thus, corporate sustainability refers to a company's activities that demonstrate the inclusion of the social and environmental concerns in the business operations and in the interactions with the stakeholders (van Marrewijk, 2003). The analyses of corporations as social institutions, with the responsibilities that go beyond their shareholders, have shown that a broad network of internal and external relationships must be recognized and facilitated in the process of the organizational pursuit of their purpose and mission (Hutt, 2010). The organizations do not exist in isolation, they instead rely on numerous relationships established with different stakeholders (Freeman, 1984; Mitchell, Agle & Wood, 1997). The normative stakeholder view of the companies focuses not on the maximization of the shareholder wealth but rather on the optimization of the sustainable economic and other benefits of all the stakeholders (Kim & Nofsinger, 2007). The stakeholders have the power to impose their influence either by supporting or by denying the support to the initiatives crucial to the survival, competitiveness, and the profitability of the company (Donaldson & Lorsch, 1983) and their roles are not static, and the same people or groups can assume different roles at different times, depending on the circumstances (Hutt, 2010). On the other hand, the instrumental stakeholder perspective emphasizes that the ability of the organizations to create and sustain the effective stakeholder relationships is an important asset (Donaldson & Preston, 1995). The stakeholder perspective is probably the most prominent, but certainly not the only one that explains why the companies engage in the sustainable transformation or CSR – for example, the resource-based view (RBV) states that the company's competitive advantage is based on its valuable, rare, inimitable, and non-substitutable resources (Barney, 1991) and the engagement in CSR is a pathway to acquire those resources. The institutional theory can also be fruitful as a framework to better understand the concepts of both corporate sustainability and corporate social responsibility (Fonseca et al., 2022).

As a concept and a slogan, sustainability has an honourable pedigree in the environmental movement (Marcuse, 1998), and the fight to have the standards of sustainability generally accepted by all the sides (societal actors), at least in principle, was successful, although, in practice, severe conflicts of interest still exist, as the different stakeholders still have different priorities (Robinson, 2004; Redclift, 2005). Focusing on the one of the most important stakeholders for any company – the consumers – the recent academic research shows that in recent times the consumers are becoming increasingly more concerned about the environmental issues (Perri, Giglio & Corvello, 2020; Bigliardi & Filippelli, 2022) and that they are generally rapidly transforming into conscious consumers, who are interested and invested in the consumption that simultaneously optimises the environmental, social, and economic consequences (Luchs et al., 2010; Calculli et al., 2021). It is important to distinguish the sustainability and the sustainable development in the general from the corporate perspective and to understand that the sustainability and the corporate sustainability are not synonyms (Moon, 2007). Corporate sustainability entails economic, legal, ethical, and philanthropic responsibility towards the stakeholders (Carroll, 1979; Lee & Carroll, 2011) and focuses on the organisational level and the corporate business models (Dobers & Springett, 2010; Fonseca et al., 2022).

6.2.2 The agenda-setting and framing roles of the mass media

It is difficult to imagine modern people navigating through life and making important choices without them being properly informed. As the bounds of the individual perception and experience are limited, most of the things that the people know come to them second or third hand, thus the mass media and how they understand, process, and transmit the events are crucial for the functioning of every society (McCombs & Shaw, 1972). The media shape the social and political realities by introducing the first-level agenda-setting mechanisms, which determine the salience and frequency of certain topics, issues or actors in the media (McCombs & Shaw, 1972; Fiske & Taylor, 2008), and then progressing to the second-level agenda setting or framing, shaping the discourses around those topics, issues, and actors. They force and direct the attention to the certain issues, and they build public images (Lang & Lang, 2009). The media can also be described as the social control agents, the entities that have the institutional role to define legal, ethical, and socially responsible behaviours and assess whether the individuals or organizations crossed over such lines (Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017). Thus, the traditional media essentially create something that would best be described as the 'common knowledge' about the general and the specific topics (Deephouse, 2000; Roulet & Clemente, 2018). Despite the ongoing transformation of the global media landscape and many challenges to the mass mainstream media posed by the rising influence of social media outlets, the failing mainstream media business models and emergence of technologies that change how people consume and process information, the role of mainstream mass media still remains crucial in the process of establishing and maintaining the prevailing societal discourses. Mainstream media content still remain the lifeblood of topical social media conversations, providing the vast majority of news links that are shared and debated online. Even if the mass media are not the ones who first publish something, their agendas and discussions continue to shape conversations around major news stories. Also, mass media journalists and commentators are gaining new authority and influence trough their expert use of social media, which actually enables the mainstream mass media outlets to gain new traction around the world, opening up the possibilities and exerting influence that were impossible earlier because of the limitations of the traditional mass media dissemination (Newman, 2011; Rauch, 2016). Thus, it could be argued that mainstream and alternative media outlets are in a way complementing each other (Kenix, 2011).

The most important aspects of the modern mass media this study deals with are related to framing – the power to set the agenda and determine the salience of certain topics, and to the two-way communication between the stakeholders (Entman, 1993; Clemente & Gabbioneta, 2017). Entman (1993, p. 52) states that "to frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described." Generally, the frames tend to diagnose, evaluate, and prescribe. The frames are used to define the problems and determine what a causal agent is doing with what costs and benefits, usually measured in the terms of common cultural values; to diagnose causes and identify the forces creating the problem; to make moral judgments and evaluate the causal agents and their effects; and to suggest the course of action, offer and justify the treatments for the problems and predict their likely effects (Gamson, 1992; Entman, 1993).

As the media have an incredibly large pool of information available to choose from, to process and to pass on, the points of view, values, biases and targeting audiences are of huge importance for the media framing and agenda setting (McCombs & Shaw, 1972). The framing and the agenda setting determine how salient certain topics and issues are, and the salience is the essential feature of the cognitive differentiation and the emotional investment, which subsequently determines the stakeholder perception of the topics and the issues (Shrauger, 1967). Most of the people who follow mass media, and who are not strongly motivated or driven to search for the particular information of interest, are just exposed to the content, and they learn about the issues but also perceive how much importance is given to it (McCombs & Shaw, 1972). Also, media framing has an important effect on the emotions. As the media either pick up the organizational cues or more salient elements of the organizational identity, they mediatize it, reinterpret it, and spread it. The media depictions of the organizations are essentially dramatized and simplified and will either be vilifying or celebrating (Roulet & Clemente, 2018).

The other journalistic norms are also used, such as personalization (when 'big' stories are downplayed to the level of personal experience), novelty (finding something new to report on), authority-order (when authoritative opinion is presented in order to settle the controversy) and balance (seeking different opinions and perspectives to simulate objectivity) (Boykoff & Boykoff, 2007). As the mass media play a powerful role in shaping the public opinion, all the stakeholders involved with the media have potentially a lot to gain or to lose (McQuail, 1985). The positive emotional responses from the general public can provide the firms with access to critical resources (human capital, markets) and strategic opportunities (Rindova, Pollock & Hayward, 2006). On the other hand, the negative responses lead to stakeholder pressure. As the general public perceptions turn into awareness and concern, the meaningful responses, organizations and actions are more likely to emerge.

The corporate sustainability paradigm shifts the sustainability discourse towards the business, making it not just a partner in contemplating, designing and implementing sustainability related policies, but also promoting it to its most important actor and agency-holder (Dyllick & Hockerts, 2002). However, for various reasons, the companies usually have problems to communicate it and to gain the acceptance and understanding. Most of the stakeholders do not have first-hand experience with the company, especially in the areas that are not company's primary concern (such as sustainability). In addition, the means of communication between the companies and other stakeholders are limited, especially the means of direct communication. The information about sustainability performance is usually disseminated via specialized sustainability reports, which are universally accessible, but which are, in both form and content, designed for small groups of interested stakeholders and tend to be one-sided, presenting an overly positive view of the company, with many organizations using sustainability reports for greenwashing purposes (de Freitas Netto et al., 2020; Uyar, Karaman & Kilic, 2020). Another problem is that the direct reach of the companies via the platforms suitable for the direct communication (such as the social media) is very limited. Thus, the communication intermediaries (infomediaries) play a crucial role in the information exchange between the company and its various stakeholders. The relationship is illustrated in Illustration 6.1.

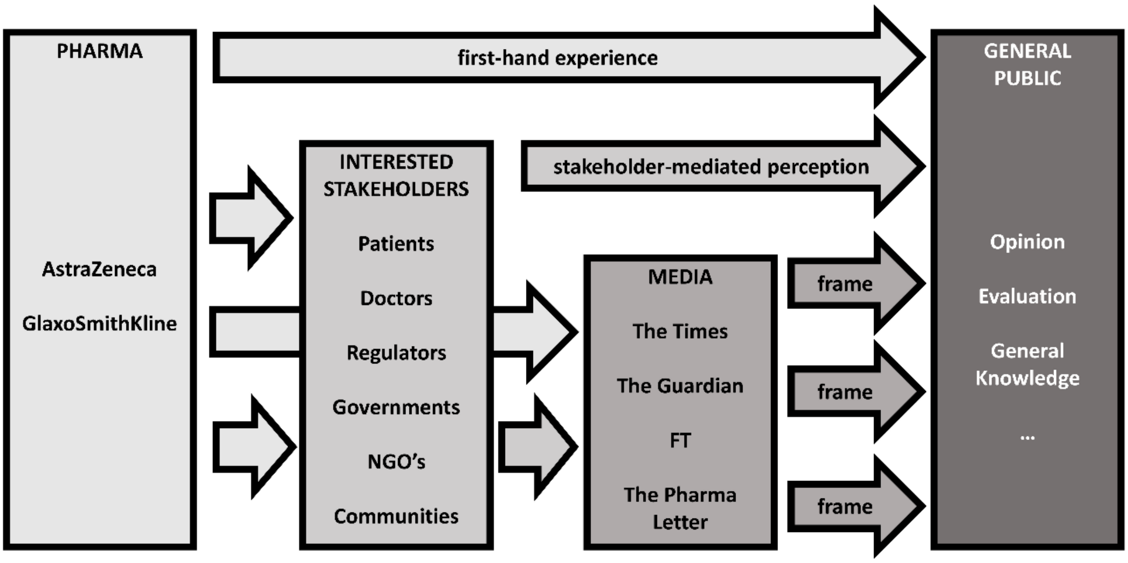


Illustration 6.1 – Diagram of mainstream media acting as infomediaries related to corporate sustainability in the pharmaceutical sector

This study proposes a longitudinal qualitative empirical study of the two major global pharmaceutical companies (*GlaxoSmithKline* and *AstraZeneca*), both based in the UK, in the period between 2000 and 2020, and how the sustainability issues, performances and policies of those companies were in fact transformed into common knowledge by the mainstream UK mass media (broadsheet newspapers, financial newspapers and industry newspapers, as different outlet types are mapping onto slightly different audiences), by employing their agenda-setting and framing capabilities. The complex notion of sustainability is being digested, interpreted, and presented to the general public and becomes prevailing public opinion.

6.3 Methodology

In the following section an overview of the methodology applied in the design of the study will be presented, starting with the brief explanation of the research context and setting (the pharmaceutical industry in the UK), following by the process of the identification of the relevant data sources, the process of collection and analysis of the data as well as the theoretical justification of the methods used.

6.3.1 Research context

This study is set in the pharmaceutical industry, to understand how the mass media shape the sustainability agenda in an industry with a particular economic, social, and environmental impact. Researching in such context and setting should be very fruitful, as the specific literature on pharmaceutical industry and its stakeholders is very scarce. Also, the nature of relationships (as there is no clear producer/supplier-consumer dichotomy and because the connection has many intermediaries), should provide for more clues on how stakeholder interactions and relationships work in a complex environment. In terms of its economic importance and value creation, the global pharmaceutical industry is one of the most powerful in the world (Pisani & Meadows, 2019; Ostwald et al., 2020). The pharmaceutical industry is one of the biggest investors and supporters of scientific research and development in the developed world (ABPI, 2016). Secondly, the pharmaceutical industry has a socially significant product as everybody uses medicines, either occasionally and to alleviate minor medical inconveniences, or constantly to treat severe illness (Goldacre, 2012). Consequently, the core activity of the pharmaceutical industry and their products very much affect how they are perceived, understood and evaluated by other stakeholders. Thirdly, being in essence chemical and biochemical companies, the overall negative environmental impact of the industry is significant (Veleva et al., 2003; Belkhir & Elmeligi, 2018).

Another important feature of the pharmaceutical industry is that the companies are distanced from their consumers and direct contact between them is minimal (Abraham & Lewis, 2000; Abraham & Lawton Smith, 2003), as there are many gatekeepers: regulatory agencies; health insurers (in most EU countries national governments) and the medical doctors, who decide whether a particular medicine is the best therapy for a particular patient (Williams et al., 2009). This leads to detachment between the company and their customers, who are unlikely to develop familiarity with or sentiments towards companies and their products.

The role of the media in this context is thus of particular significance. The reputation of the pharmaceutical industry can be seen as contradictory. Despite the benefits it brings to the world, its orientation towards profit and high profit margins are viewed with mistrust. Occasional reports about sometimes dubious practices with risky consequences for patients add to the mistrust and bad reputation (Fischer, 2009; Goldacre, 2012). For many people, the pharmaceutical industry is 'contested' in the same way as tobacco, armaments or gambling (Parker, 2007; Kessel, 2014). This aspect is less emphasized in countries with comprehensive insurance schemes, as it is the case in Europe (Fischer, 2009). Extensive research conducted by *YouGov* in the UK in 2013 concluded that the reputation of the pharmaceutical industry in UK was generally positive among the public, owing to the economic benefits it provided, but that it suffered from a trust deficit (Rowe, 2013).

Because of the specific context in which the pharmaceutical industry has been chosen as an extreme case, a detailed empirical study of several companies seems as a methodologically sound way to conduct the research (Bonoma, 1985; Eisenhardt, 1989; Van de Ven, 1989; Gummesson, 2000; Gummesson, 2005). Two similar companies are chosen for the study, *GlaxoSmithKline* and *AstraZeneca*. Both companies are UK based, listed on the *London Stock Exchange*, are part of *FTSE 100 Index*, have tens of thousands of employees all over the world, are present in global markets, both were created some twenty years ago following big mergers and groupings, and both are an important part of UK business landscape. The two cases are not intended for comparison but in order to more accurately calibrate the data, to serve as correctives to each other and have more reliable findings.

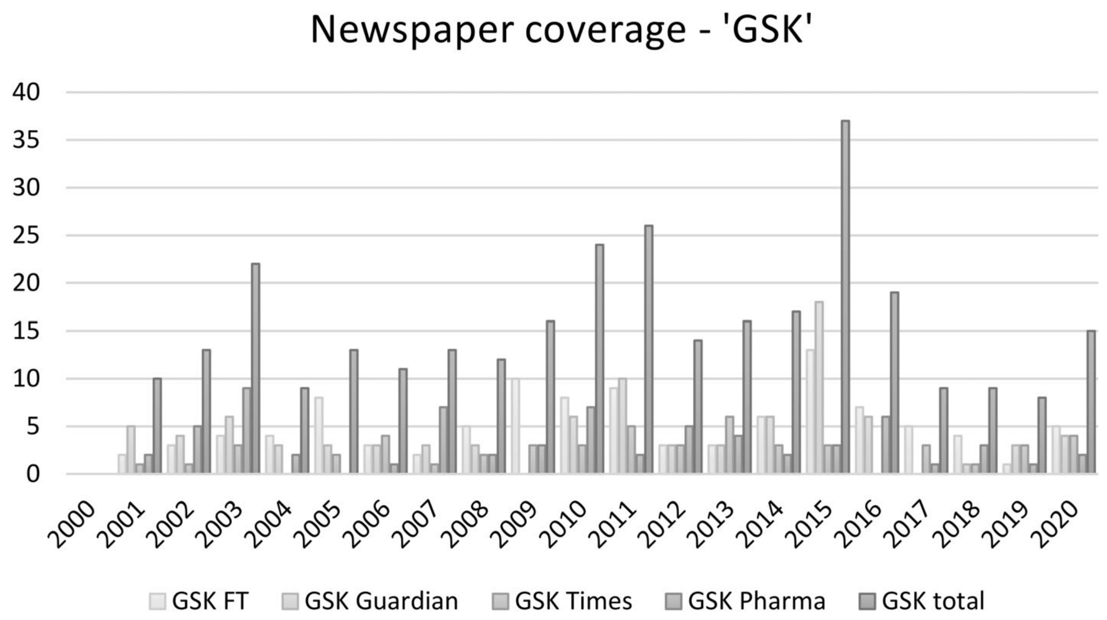
6.3.2 Data collection

As the study was interested in understanding how mass media frame corporate sustainability, newspaper articles were selected as primary data sources for the research. Exploring the coverage of sustainability involving *GlaxoSmithKline* and *AstraZeneca* in the period between 2000 and 2020, *Nexis* database was used to search and collect all relevant articles within the timeframe, published in the following newspapers and magazines: *The Guardian* (including *The Observer*), *The Times* (including *The Sunday Times*), *The Financial Times* and *The Pharma Letter*. The justification is the fact that mainstream broadsheet newspapers do cover sustainability significantly, not just in general, but also related to particular industries and companies (Doulton & Brown, 2009; Koteyko, 2012; Diprose et al., 2018). The initial goal was to include other publications to make sure that the pool of sources better matched reading preferences of the general population but examining the tabloid newspapers showed that they simply do not report enough about sustainability, especially considering the selected companies (Boykoff & Mansfield, 2008). By selecting *The Times* and *The Guardian*, the study tried to avoid (or to level out if possible) any potential political and ideological bias, considering that *The Guardian* has the reputation of being left-wing and liberal and *The Times* of being right-wing and conservative (Sparks, 1987). In addition, the selection of *The Financial Times* and *The Pharma Letter* ought to have calibrated the overall data sources pool, in the case that financial or industry viewpoints were neglected by the mainstream broadsheet newspapers. The media is not a homogenous ensemble, but a rather heterogeneous set, where different media outlets have different political or economic motives, and they have different reach (Roulet & Clemente, 2018).

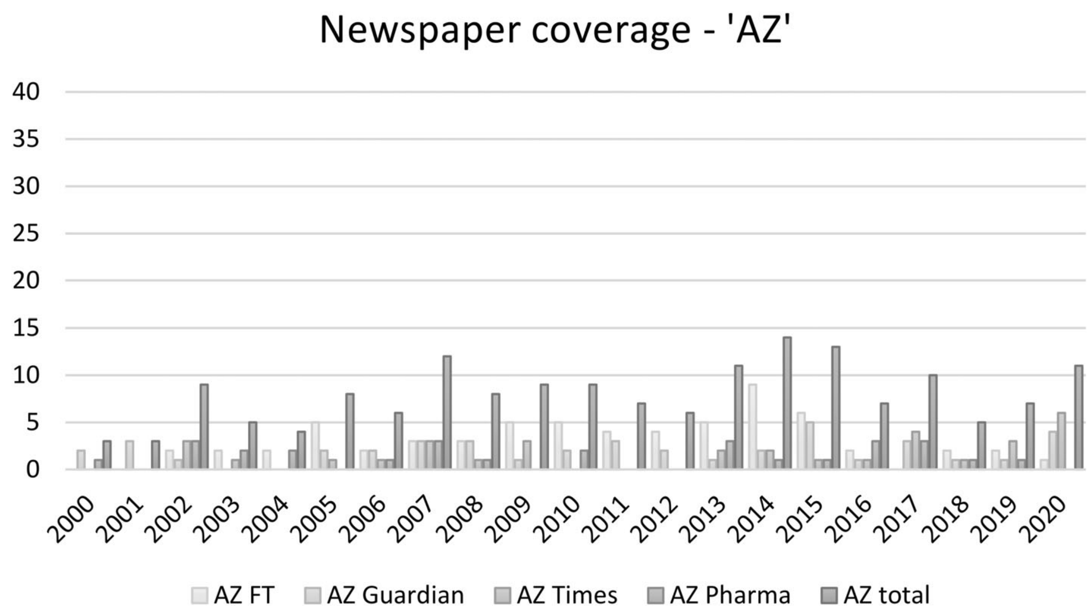
The *Nexis* database was searched by using the company's name, in both full and abbreviated form (for example, "*GlaxoSmithKline*" and "*GSK*"), and by using terms "sustainable" and "sustainability" ("sustainab*"). This approach had its deficiencies, as it is certain that some of the companies' sustainability activities had slipped under the radar. However, one of the purposes of this research is to understand media frames around these specific terms, and thus it was important to be semantically precise. More than 1,000 newspaper articles were found, downloaded and sorted. In addition, press releases by two companies we collected and added to the source pool, ones that mentioned "sustainable" or "sustainability". They were downloaded from company websites and from *Nexis* database, 134 for *GlaxoSmithKline* and 147 for *AstraZeneca*.

6.3.3 Data analysis

Articles were uploaded to *ATLAS.ti* qualitative analysis software. Using such software in academic research not only helps researchers to get better, more systematic and consistent results, but also is a gold standard of contemporary academic qualitative research, especially in content analysis of large portions of texts (Kaefer, Roper & Sinha, 2015). The articles were then sorted by adequate document groups (by company, by year, by newspaper, etc.), for easier navigation and manipulation. The articles went through initial reading, without being coded, in order to remove duplicates as well as articles that referred to "sustainable" and "sustainability" in ways other than the ones we are interested in. A total of 477 articles were analysed, 310 associated with *GlaxoSmithKline* (90 from *The Guardian*, 51 from *The Times*, 105 from *The Financial Times* and 64 from *The Pharma Letter*) and 167 with *AstraZeneca* (42 from *The Guardian*, 33 from *The Times*, 64 from *The Financial Times* and 28 from *The Pharma Letter*). A certain number of articles mentioned both companies, usually articles that were dealing with general trends in pharmaceutical industry or business. The articles were very different and diverse – some were just brief agency news, given without comments, but some were interviews with different relevant people, editorials, expert opinions, feature articles from regular contributors (usually health or business experts) and other. In the term of volume of the text, some were brief (around 200 words), and some were very long (up to 2,000-3,000 words). In the terms of potential difference in the quality and volume of articles, there is no substantial difference between the outlets – all of them provided the entire variety. Details are available in Graphs 6.1 and 6.2.



Graph 6.1 - Newspaper coverage of *GlaxoSmithKline* by year and outlet



Graph 6.2 - Newspaper coverage of *AstraZeneca* by year and outlet

The articles were analysed by using a combination of the grounded approach – to read the text and to see what comes up and incorporate those findings into our code list (Strauss & Corbin, 1994; Locke, 2001), and by using the crude initial code list that emerged from theoretical knowledge and general desire to conduct discourse analysis of the articles (Harris, 1981; Potter & Edwards, 1996; Phillips et al., 2004; Coulthard, 2014). Another important goal was to see whether it was possible to identify which aspects of sustainability were represented in the media discourse, and thus discussed and evaluated in the articles (Pal & Jenkins, 2014). For that purpose, 17 SDGs (Walker et al., 2019) were included into the code list, as the generally used triple bottom line classification (the themes that were roughly related to environmental, social and economic issues) seemed to be to crude (Pal & Jenkins, 2014). Thus, the coding procedure was in accordance with the rules of thematic analysis, with both open and axial coding being applied.

Every article was re-read once again and coded with suitable codes from the initial code list (first-order codes). The level of analysis was the entire article. Depending on the article format, type and length, some were assigned with only few codes, but some were assigned with large number of codes. Regarding the sentiment analysis of the articles, some were assigned more than one code, as some of the articles, especially longer and more analytical ones tended to express more than one clear sentimental evaluation (for example, in the same article some actions by the companies were evaluated positively, and others negatively). In the second reading, second-order codes emerged (sustainability frames). The coding and the combination of first-order and second-order codes enabled the recognition of patterns and capturing of the emerging themes, which were then subjected to more detailed analysis. Sentiment analysis helped to establish the overall coverage and evaluation and thus gave the introspection into the perception of wider audiences and whether it had changed over time. More details about coding process and recognition of emerging frames are available in Appendices 5 and 6.

6.4 Findings

In the Findings section of the study the main results are presented. First, the overall overview of the most important episodes that drove the increase of press coverage and salience of sustainability in the pharmaceutical sector in the UK is provided, followed by the results of the overall sentiment analysis of the press articles. Next sub-sections focus on the analysis and explanation of the emerging themes in the media discourse and how they were framed by the mainstream printed media.

6.4.1 Salience of sustainability and the sentiment analysis of the media articles

Quantification of the collected mainstream newspaper articles from the selected media outlets in the time period between 2000 and 2020 suggested that the overall interest in the issues of sustainability grew in the period. The rise in interest was not rapid, nor it was linear, but it is noticeable. The peak of salience of sustainability issues and problems for both companies was in 2014 and 2015, with the trend of the slight decline in the following years, although *AstraZeneca* continued to attract interest in the field of sustainability until the end of the examined period.

What drove the interest of the mainstream media towards sustainability issues and problems related to selected companies was mostly contextual and related to specific problems each of the companies faced, rather that general concerns over sustainability, either on universal or on sectoral/industry level. In the examined time frame, both companies faced many challenges related to all three aspects of sustainability and some of these issues were important enough for mainstream printed media to follow them and frame them in a certain way. The overview of the topics that drove the salience of sustainability issues for both companies can be found in Tables 6.1 and 6.2 (closely related and complementary with Graphs 6.1 and 6.2).

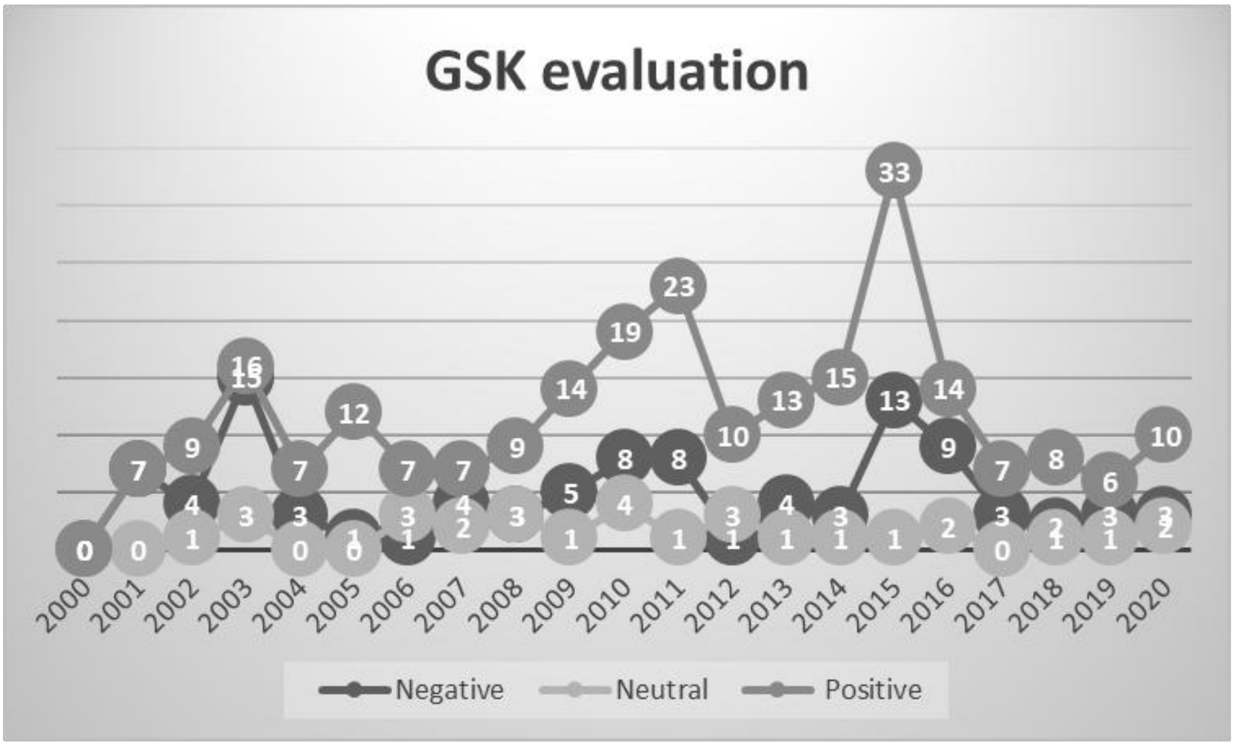
2001-2005	- Controversies over the availability and prices of HIV treatments in less developed countries. - Company's commitment to combat neglected diseases. - Intellectual property rights.
2008-2011	- Effects of global economic crisis. - Viability of 'big pharma' business model and search for new ways of doing business (generics, tiered pricing, acquisitions, expansion to emerging markets, consumer goods, etc.). - Confrontation with generic medicines makers. - Creation of *ViiV Healthcare*, a joint project of *GSK* and *Pfizer* to combat HIV. - Swine flu epidemic. - Pricing crisis, especially in the EU (payment issues, reduced healthcare budgets). - New relationship with the UK government (incentives for R&D and tax cuts) and recognition of pharma as UK strategic industry.
2014-2016	- Concerns over *Brexit*. - Potential development of malaria vaccine. - Ebola outbreak in Africa. - Bribery scandal in China and subsequent difficulties in Chinese market. - Corporate engagement in formulating UN SDG's. - The change in executive leadership (Emma Walmsley replacing Sir Andrew Witty).

Table 6.1 - Increased interest by the press in *GSK* sustainability and salient topics that drove the increase

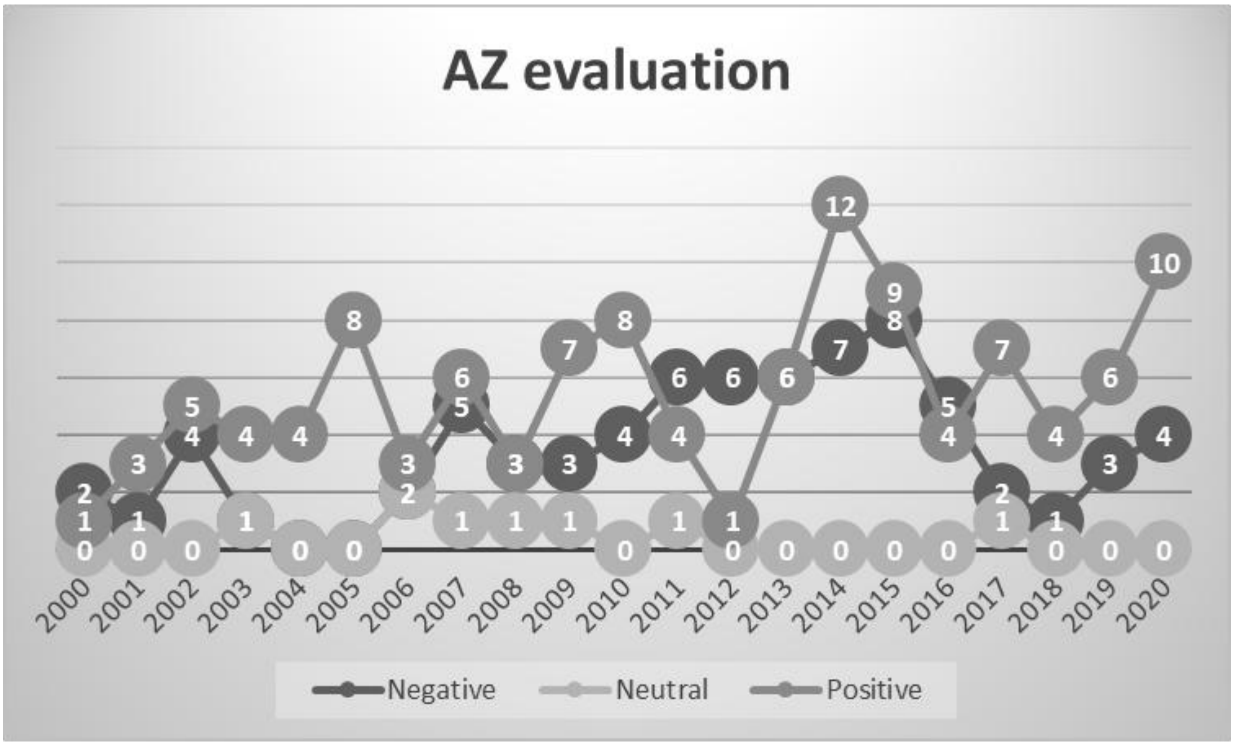
2002-2003	- Negative associations with *Monsanto* (related to the cultivation of GMO crops). - Issue of access to medicines in less developed countries. - Questions about the viability of 'big pharma' business models and poor *AZ* pipeline.
2007-2009	- Crisis of business model and effects of global economic crisis. - Potential merger with another big pharma company (maybe even *GSK*). - Swine flu epidemic. - Criticism over job cuts in UK.
2013-2015	- Issue of competitiveness. - Pursue of new business models. - Proposed takeover by *Pfizer*. - Cooperation with *Cambridge University*.
2016-2017	- Concerns over *Brexit*. - Issue of availability and price of medicines in the *NHS* (disputes with *NICE* over cost effectiveness).

Table 6.2 - Increased interest by the press in *AZ* sustainability and salient topics that drove the increase

When it comes to the overall sentiment analysis, it seems that the general evaluation of the sustainability of the selected British pharmaceutical companies in the period was net positive. Most of the articles were analytical in their nature and they were examining different sustainability related issues and problems from a variety of perspectives, thus they were somewhat complex in the terms of the assigned evaluation – some issues and actions by the companies were positively evaluated and some were evaluated negatively. There were also a significant number of articles that were purely informative, thus their overall evaluation was neutral. Considering the fact that the pharmaceutical sector is generally seen as somewhat problematic (especially in the terms of the ethicality of businesslike behaviour in the context where the companies provide for a product that can severely affect individuals' lives and wellbeing) and taking into account the idea that being sustainable is seen as inherently positive trait (and thus automatically evaluated positively), a tendency can be seen that the mainstream media outlets take the sector/industry context very much into account when evaluating the corporate sustainability performance and actions. More detailed information on the sentiment analysis (evaluation) of the selected companies can be seen in Graphs 6.3 and 6.4.



Graph 6.3 – *GlaxoSmithKline* evaluation



Graph 6.4 – *AstraZeneca* evaluation

6.4.2 Emerging themes

Framing of the mainstream newspaper articles related to *GlaxoSmithKline* and *AstraZeneca* allowed us to discover the different ways in which the reality related to sustainability was produced (Hardy et al., 2004). Several important themes were identified, themes that gave the overall tone to media coverage of sustainability of the companies involved: 1) Core business issues; 2) Socioeconomic and political significance of pharma; 3) Importance of communication and cooperation; 4) Corporate leadership as drivers of sustainability and 5) Environmental issues (and the lack thereof). Below the frames and themes will be elaborated in more detail.

6.4.2.1 Focus on core business

Most important and salient frames were the ones that were related to companies' core business practices – their work on research and development of new medicines, medicines' efficacy and safety, patients having adequate access to medicines, distribution through various outlets (private or government-backed healthcare systems), pricing and the adequate address of future healthcare needs (with consideration of local and regional specificities). The newspapers placed great importance on these issues, for example, stating that "…there is scant cyclicality in the fortunes of *GlaxoSmithKline* and *AstraZeneca* in accordance with changing perceptions about the strength of the drugs they are selling or developing" (Cole, 2006) and that "…there's a recognition that, actually, the biggest impact a company has is in its core business activities" (Tomkins, 2009).

Both *GlaxoSmithKline* and *AstraZeneca* were praised for their historical contribution to the development of life-saving medicines. Much emphasis was put onto the fact that these were developed with significant financial investment and risk by the companies and the engagement of companies' research and collaborative resources and capacities (Anonymous, 2004). Both companies were appreciated for efforts in making healthcare more efficient and evenly distributed. However, the newspapers were concerned about what was to come next and focused on emerging problems with companies' R&D pipelines: 1) The rising cost of R&D, which made new medicines far more expensive than before; 2) The emergence of so-called 'me-too' drugs, that were compounds very similar to existing ones; 3) High failure rates for new drugs that were being tested; 4) Lack of capability of companies go beyond 'big pharma' business model and diversify their R&D to new emerging technologies (biotechnology, gene therapy, etc.); and 5) Focusing R&D solely on profitable new treatments and neglecting diseases that were endemic in poorer parts of the world and so-called 'orphan' drugs (drugs that treat rare, mostly autoimmune diseases) (Davoudi, 2008). Newspapers were heavily involved in the debate about the focus of companies' R&D initiatives, pointing out that pharmaceutical sector does have a responsibility that goes beyond pursuing profits and "…calling on drug companies to be 'in step with society' and […] they should construct their goals around business models that address the world's urgent health needs" (Quinn, 2011). However, it was also clearly pointed out that "…we cannot as an industry solve the healthcare problems of the entire poor world, nor should we be held accountable to do that. What we should be held accountable to is to the extent we can to make our products available on affordable terms to many of the poor countries" (Boseley & Pratley, 2003) and that "…the industry should focus on what it is intended to do, which is […] making the right products at the right price" (Smedley, 2015). The debate was very fruitful in a way that a shift in corporate perspective is visible – from a very defensive stance that the corporate R&D is to be driven by long-term business strategies, to the idea that cooperation and joint action could bring significant advances in the development of new medicines for neglected and orphan diseases.

An important emerging frame was about availability of existing medicines, especially to patients who were unable to pay the full price. This related to less developed countries with poor public healthcare infrastructure and plagued by epidemics of HIV, malaria, tuberculosis and other diseases. Developed countries in which significant proportions of population lacked access to health coverage (US) as well as countries with universal healthcare systems, such as the UK or EU countries but where governments have placed a cap on healthcare expenditure were also affected (Ryle & Mathiason, 2001; Anonymous, 2002a). This frame is a complex one and various perspectives were introduced and examined, with newspapers trying to remain objective or align with any of the confronted viewpoints. Most of the newspaper articles tried to explain and justify all of the confronted perspectives. They highlighted the validity of the moralistic perspective of patients and their advocates, who argued that people in need had a right to access the medicines if they were to save their lives even if they were not able to pay for them. At the same time, they also explained the business perspective, which argued that developing and producing medicines took significant investments and that profits were a necessary incentive for companies to continue with R&D (Mathiason, 2001; Garnier, 2005; Cole, 2009). The newspapers were very agile in trying to find solutions to this problem and offer different possibilities for confronted sides to explore. Any sort of advancement in negotiations and rapprochement in attitudes was noted as a big step forward.

6.4.2.2 Socioeconomic and political significance of pharma

In the economic domain, sustainability was framed as the companies' capability to create value, attract significant investments, boost employment rates, secure steady profits, contribute to the economy and society by paying taxes, providing for pensions and to contribute to overall national economic stability and growth. As for the social side, pharmaceutical companies were deemed as ones that provide a socially valuable and significant product that save and improve lives of billions of people, contributing positively to national wellbeing, but also companies that support scientific advancement with their investments in education and R&D. In political sense, being economically and socially important, pharmaceutical industry was acknowledged as a strategic industry for the UK, which meant that the companies enjoyed high level of influence on the government and politicians, a relationship that functioned in both ways – industry benefiting from special attention given by the authorities but also government profiteering from industry's expertise and strategic plans and performance.

The media also had major concerns related to economic performance and social significance of pharmaceutical companies, and it was about the issue of viability of the 'big pharma' business model, based solely on blockbuster drugs, patent protection and market exclusivity (Anonymous, 2002b), with the major concern being 'patent cliff' (sudden loss of income due to patent expiry) (Song & Han, 2016), and there were calls for diversification of business models and products, so that companies could be more robust and mitigate economic risks (Cole, 2007; Wachman, 2007). "We're not interested in casino capitalism; we want sustainable prosperity" (Jameson, 2003) and "… we want companies to have high-quality, sustainable earnings" (Maitland et al., 2004). Experimentation and decisive action were praised (Jack, 2010). However, being more competitive sometimes meant abandoning R&D and production in the UK and moving abroad, and the British press was very concerned about job cuts and impacts on local communities (Jack, 2012; Kemp, 2013). Salient topic was the idea of possible big mergers (Mathiason, 2007, Jack, 2009a), that would theoretically seal companies' future by creating business and R&D giant(s), closely tied to UK economic and governance structures, making it companies of national interest, that would be 'too big to fail', with the logic that "… in the mid- to long-term, R&D innovation, organic growth, and internal drivers are still key facets behind creating a successful company and providing an organization with sustainability" (Anonymous, 2009a).

There was an overwhelming agreement that the pharmaceutical industry has a significant and positive role to play in society: “We are proud to be making a contribution to improving healthcare through the delivery of medicines that make a difference. We believe that what we do is important. We also believe that how we do it is just as important. This is why we are working hard to ensure that everyone in the company understands that every interaction counts towards making sure that [the company] manages its wider responsibilities effectively and continues to be a trusted member of society” (Anonymous, 2007a). Following the public belief that pharmaceutical companies have a special humanitarian duty to help the sick, there were ‘societal expectations’ from the industry (Boseley & Pratley, 2003; Anonymous, 2007b). After all, “… companies need a bigger and better purpose than simply maximising shareholder value. They should aim, above all, to be great businesses: serving customers, creating employment, making sustainable profits and generating a good return for all their many stakeholders” (Stern, 2014).

By working together with the government and other stakeholders in the field of healthcare, pharmaceutical companies were expected to improve the quality and coverage of the *National Healthcare Service* (*NHS*) (Jack, 2013a). The government-controlled bodies that were designed to devise, implement, finance and monitor healthcare policies (such as, for example, the quango *National Institute for Health and Care Excellence* (*NICE*)), were often seen as slow and inadequate, failing to completely fulfil their duties to the people. Thus, the pharmaceutical companies, seen as vibrant and assiduous, were called to help out. Despite the recognition that, as private businesses, pharmaceutical companies have different priorities than the general public, the general conclusion is that by doing their business and working together with other stakeholders, pharmaceutical companies will inevitably contribute to the improvement to the national healthcare system (Choudry, 2020).

The overall portrait of both companies is positive, sometimes even on the brink of open praise (Smith, 2014). *The Times* even portrayed the work done by *GlaxoSmithKline* and its effect on human rights, poverty and health as ‘moral’ work. (Hosking, 2005). Newspapers were extensively writing about awards both companies were getting and their good ESG rankings (Anonymous, 2017). Particular emphasis was put on companies’ work on development of new drugs and positive impact on the health and wellbeing of the global population. Overall, it was noted that “… I’ve never seen anything that looks so much like a systemic response to things people have been asking of the pharmaceutical industry for a long time.” (Anonymous, 2009b).

Acknowledging and appreciating the economic and social significance of the pharmaceutical industry, the newspapers focused their attention on how this importance was reflected in the political arena – they were seen as precious economic and social organizations and agencies for human betterment: “If Britain is going to improve its economic and social performance, it needs more such companies, especially in the knowhow-driven economy of today” (Hutton, 2016). The amount of money, influence and expertise materialized into political capital, which enabled the companies and their executives to become close to political leaders, not just politicians who were in charge of healthcare or economic affairs, but also ones of the highest rank, both in the UK and internationally. Very often newspapers would report that executives of *AstraZeneca* and *GlaxoSmithKline* met with British and world political leaders. (Boseley, 2002; Jack, 2005). This closeness to key political figures and very often even in a formalized advisory capacity, enabled the companies and the industry to promote their business interests at the highest levels of power. The view on this closeness was twofold – it was seen as normal and even expected that big businesses and strategic industries had the attention of leading politicians (King, 2017). However, concerns were expressed that the connection between business and politics would potentially lead to poorer outcomes for patients and taxpayers

(Monbiot, 2012). The newspapers especially pointed out the danger that the companies would use their influence to pressure the government to give them financial incentives or that the government would pay higher prices for the medicines supplied.

Consequently, the political closeness works both ways. If the corporate executives assert influence on politicians, the politicians can and will do the same. This reciprocity was a very important issue for the press. With the acknowledgement that "… with the global giants *GlaxoSmithKline* and *AstraZeneca* based here, pharmaceuticals is probably as close as Britain gets to a strategic industry […] with its highly skilled workforce and liberal capital markets, Britain could hang on to higher-value jobs in research and development" (Stewart, 2011), it was natural that politicians would feel the urge to intervene when the strategic position of the industry was in danger. One of such potential dangers was the possible takeover of *AstraZeneca* by a foreign company, that prompted fears that the company might be moved to another location and that jobs, R&D spending and tax contributions could leave the UK. Initially, the protectionist stance was associated with the political left (Jenkins, 2014). However, initial opposition to government interventions into the free market developed into a more polarized debate after a concrete takeover attempt of *AstraZeneca* by American company *Pfizer*, especially after "… politicians and policy makers have argued about the national interest, and the threat the takeover poses to the country's scientific base" (Anonymous, 2014). The ruling *Conservative Party*, otherwise very much supportive of free market mechanisms, also took a protectionist stance, as Prime Minister Theresa May stated that "… a proper industrial strategy wouldn't automatically stop the sale of British firms to foreign ones, but it should be capable of stepping in to defend a sector that is as important as pharmaceuticals is to Britain" (Pratley, 2017).

6.4.2.3 Importance of communication and cooperation

Another important frame describes the interaction between different stakeholders, not just in the field of healthcare, but much wider in scope. The principal notion is that any relevant sustainable initiative, policy, strategy or action, is necessarily the consequence of meaningful interaction between stakeholders, their communication and cooperation, and must be a result of joint effort. For example, in order to address the AIDS crisis in sub-Saharan Africa, where patients were lacking medical attention and, most importantly, did not have access to life-saving antiretroviral drugs, pharmaceutical companies were called to either reduce the prices of such drugs or to waive the patents so that generic manufactures could produce them for a fraction of the price (Ahuja, 2001; Ryle & Mathiason, 2001). Initially, the companies were reluctant to support such initiatives, because of financial loss, however, a discussion between the companies and all the other relevant stakeholders (*UN* and *WHO*, African governments, international NGOs, medical experts, philanthropists and others) eventually led all stakeholders to change attitudes and resulted in series of small improvements and concessions by all sides. Pharmaceutical companies realized that they were getting bad publicity and that they were not selling AIDS medicines in poor countries anyway and other stakeholders realized that pharmaceutical companies are the only ones that are able to provide the solution (Mathiason, 2001). Talks and compromises resulted in generous donations, tiered pricing, drastic reduction of the price and even giving up some of the intellectual property rights (Anonymous, 2002a). This approach of communication and negotiation eventually resulted in drastic improvement in sustainable access to life-saving medicines for millions of people. Even more importantly, the stakeholder network that was created during the process continued to operate and facilitated future joint projects (Boseley, 2011).

Some major business developments were also the result of rapprochement between different interested sides. Both *AstraZeneca* and *GlaxoSmithKline* had major problems with sustainability of R&D and product pipelines. It was difficult for them to push for the discovery of new medicines to address the emerging needs of the patients but also to substitute for their existing medicines that were losing patent protection. Major obstacle was the organizational culture within the companies that favoured centralized and even secretive approach to R&D. However, the companies made significant effort to forge new relationships with different stakeholders and make partnerships that would yield benefits for all the sides. Apart from partnerships with smaller and independent research-oriented companies, the companies approached laboratories and universities. *AstraZeneca* created an endowment fund to sponsor research projects of various British universities (Brown, 2004), especially in the north and northwest of England, which was historically the company's stronghold (Stewart, 2005). It culminated in partnership with the *University of Cambridge*, which ultimately led to *AstraZeneca* moving the corporate headquarters to Cambridge (Vize, 2014). *GlaxoSmithKline* had the similar approach to invest in university spinouts and early-stage healthcare firms (Stewart, 2011), such as the collaboration with the *University of Nottingham* to create and equip the sustainable chemistry laboratory (Anonymous, 2013d). Significance of the collaboration projects was very enthusiastically acknowledged: "As home of *GlaxoSmithKline* and *AstraZeneca*, two of Europe's largest drug makers, and half the world's top 10 medical research universities […] the country punches above its weight in life sciences." (Ward, 2016).

Another important window for cooperation was between the companies, local authorities, the government, and its institutions – facilitating the development of sustainable communities, strengthening the relationship with the workforce and their families and getting the overall approval for their actions. For a very long time *AstraZeneca* was engaging with local authorities and universities in north of England, investing in research and infrastructure (Stewart, 2005). When it became imminent that the company would leave their longtime research centre in Alderley Park near

Macclesfield, a partnership was set up by the company and the local authorities in order to find a sustainable solution for the research centre and attract various R&D companies and projects to replace *AstraZeneca* (Anonymous, 2013a; Slack, 2015). *GlaxoSmithKline* took a very similar path.

One of the most interesting stories about successful cooperation includes two business rivals, *GlaxoSmithKline* and *Pfizer*. In order to improve sustainable R&D profile and positioning in the HIV treatment market, the two otherwise fierce rivals decided to merge their projects and spin it off as a separate company, *ViiV Healthcare*. In over a decade of its existence, *ViiV Healthcare* became one of the most important players in the field of HIV treatments, bringing significant financial benefit for its owners but also important and tangible advancement in efficacy and price of HIV medicines (Elder, 2017).

6.4.2.4. Corporate leadership as drivers of sustainability

Another important media frame is the one that emphasizes the role and influence of corporate leadership in all issues and matters that are somehow related to sustainability: “Boards set the tone and play a central role in developing organisations’ moral compasses”. (Connolly, 2010) Executives of various levels and different departments and regional affiliations were asked to explain, clarify or support different sustainability actions, strategies and policies. Very often were CEOs given a lot of space to voice out their opinions (Boseley & Radford, 2003; Garnier, 2005; Jack, 2011). The press was especially interested to hear out what the succession of *GlaxoSmithKline* chief executives had to say, starting from shift in corporate strategy on drug pricing and availability and exploring potential partnerships to improve sustainable access to healthcare to vulnerable populations, announced by Jean-Pierre Garnier (Garnier, 2005), to new radical direction of Sir Andrew Witty, who said that “… we want to be a company that is truly a partner in addressing the health care challenges in the world's poorest countries, no matter how difficult they are. A restless company, never satisfied with what it has achieved, but always looking for ways of doing more" (Anonymous, 2010), to Emma Walmsley, who herself presented a vision of company's sustainable R&D and financial future (Appleyard, 2020).

Personal engagement of corporate executives in sustainability projects, as well as various cooperations and consultations with other stakeholders is highly valued, as there is a general understanding in the press that CEOs are a very valuable asset for any potential action for change (Cole, 2005) It is seen that their expertise, knowledge, networks and personal commitment to sustainability are a key to success. The newspapers are especially vocal when companies' executives are being assigned with the consultants' position for the national government and their bodies (Ashworth, 2003).

Thus, the executive involvement is inevitably seen as a sort of seal of approval, that guarantees company's seriousness. Even more, it is argued that the transformative role of executives had evolved to such extent that they are actually leaders in sustainability transformation: "… others might argue that some of the most passionate and effective sustainability activists also happen to be CEOs of major companies" (Gittsham, 2015). Many such examples can be extracted from the press: "Many CEOs now realize that there is a clear business case for good policy on sustainable development" (Gittsham, 2015). An interesting paradox can be identified in examination of this discourse. At the same time, it is argued that the change in corporate culture and the overall understanding of what is the role of business in society are prerequisites for substantial and significant shifts towards sustainability, but it is also highlighted that the executives and their personal beliefs, values and commitments are also very important factor in the process. Interestingly, it almost seems that certain individuals from the executive echelon were associated with certain types of both business-related and sustainability-related achievements and failures, and that their legacy could even be considered as a sort of an ‘era’. This sort of historicizing the tenure of the corporate executives and seeing their legacy closely coloured by certain issues, problems and developments is quite interesting as it suggests that the ‘universal knowledge’ and memories about the business sector develops very similarly to historical memory, with its Churchills and Napoleons and their eras. For example, the simplified characterization of the *GlaxoSmithKline* CEOs by the press can be seen in Table 6.3.

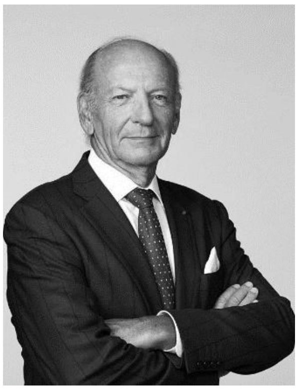
 Jean-Pierre Garnier (2000-2008)	- The *Maverick*. - Steered the company in its beginnings. - Strongly connected to breakthrough in the North American market. - Controversies over drug pricing and accessibility, especially in Africa. - Unapologetic, defended the corporate right to prioritise making profits.
 Sir Andrew Witty (2008-2017)	- The *Facilitator*. - New business models, expansion to East Asian markets. - R&D cooperation with universities. - Political connections with UK government. - Lowered the prices and gave up on some of the intellectual property rights. - Corruption scandals in China. - Cooperative, willing to negotiate with stakeholders on how to tackle sustainability problems.
 Emma Walmsley (2017-)	- The *Reformer*. - Rethinking business strategy. - Focusing on R&D. - Long-term sustainability strategy, carbon neutrality, etc. - Gender pay gap controversy. - Long-term oriented and strategic – setting up plans and strategies for comprehensive sustainable transformation.

Table 6.3 – CEOs of *GlaxoSmithKline* in the period 2000-2020 and their simplified characterization by the British printed media

6.4.2.5. Lack of focus on environmental issues

One aspect that stands out concerns the widely accepted presumption that the core of sustainability considerations is about the preservation and protection of the natural environment. Several articles are focused on (or casually address) problems of environmental nature related to the company activities, both positive and negative in their sentiment. The press would sometimes criticize the companies' environmental actions or records – *GlaxoSmithKline*'s factory in Lancashire is described as "… the third biggest carcinogen-emitting chemical producer in UK" (Mathiason, 2002); and the company's record in sustainable manufacturing was not very strong. As for *AstraZeneca*, in 2015 the press questioned the company's unsustainable manufacturing practices and subsequent excess pollution in India (Marriage & Grene, 2015). Yet, more space and attention were given to corporate activities directed towards improving their environmental record, especially in cutting down greenhouse gas emissions, reducing water usage and energy consumption, implementing more efficient manufacturing processes, reducing waste, even up to sustainable usage of office space, staff carpooling and using public transportation and bicycles (Jack, 2009a; Jack, 2009b; Walker, 2015). The press was also interested in more innovative ways to address environmental issues, for example *GlaxoSmithKline*'s research work on different enzymes with the ability to dissolve plastic (Linklater, 2020).

6.5 Discussion

The pharmaceutical industry and the two particular pharmaceutical companies chosen for this study have proven to be good research setting for examining mainstream broadsheet newspapers framing, describing and shaping corporate sustainability. Ordinary people form their opinions, give their evaluations and build their sentiments about companies either by first-hand or second-hand experiences (via interested and more engaged stakeholders), or by getting information from the various types of media outlets (McCombs & Shaw, 1972). In a situation where a company is generally familiar to the public and has direct contact with the customers (product usage and advertising), who can identify the company and their products easily and develop affinity or dislike towards them, or where the company's environmental or social performance is generally familiar, it is fairly easy to establish direct communication between the company and the general public. On the other hand, this study shows that in specific contexts, like with the pharmaceutical industry and their products and their environmental and social performance, where the customers are effectively cut off from companies and where, despite the fact that so many people use their products, they are unfamiliar with them, understanding of complex ideas (such as corporate sustainability) is far more complicated and not so straightforward process. The companies are trying to reach other stakeholders, either by sustainability reporting, press releases or social media activities, but the effect of those strategies is very limited (Schneider et al., 2010; Comyns et al., 2013; Demir & Min, 2019). This severely limits the effectiveness of predominantly voluntary and market-based mechanisms of corporate governance, where customers are able to reward or punish the companies related to their (sustainability) performance (Redclift, 2005; Perri et al., 2020; Bigliardi & Filippelli, 2022).

The lack of direct contact and communication forces other stakeholders to step up and act as intermediaries (Deephouse & Heugens, 2009; George et al., 2016a). Shaping common knowledge is a complex process, where many actors intentionally and unintentionally participate, but this also diminishes their interpretation powers and agency, creating a cacophony of different and very often confronted opinions and interpretations, which inevitably leads to ambiguity and misunderstanding (Lewis, 2000). Therefore, in order for common knowledge about sustainability of pharmaceutical companies to exist, the super-agent is needed, who can capture, analyse and process all the viewpoints into one or few coherent frames. Mainstream media, especially the broadsheet mainstream newspapers, are capable of doing that task. Thus, mainstream media act as infomediaries, setting the sustainability agenda and framing sustainability in relation to pharmaceutical industry (McCombs & Shaw, 1972; Norris, 2000; Fiske & Taylor, 2008; Lang & Lang, 2009; Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017; Barkemeyer et al., 2018; Roulet & Clemente, 2018). The ability of mainstream media to assert power (as a stakeholder that can affect public opinion), legitimacy (as an unbiased and expert judge) and urgency (setting the public agenda and determining the salience in any particular time), proves that for the pharmaceutical sector, mainstream media represent dominant or even definitive stakeholder (Mitchell, Agle & Wood, 1997). It also positions the media in the role of a very effective social evaluator and, subsequently, in a role of a social influencer.

Reflecting on the issue of salience of sustainability in media and the changes over the 20-year period, the increase in number of articles was visible and it was gradual and very much context-related. There were major episodes in history of both companies that drove the newspapers to focus their attention to companies and different aspects of their corporate sustainability. Also, the slow increase of salience of sustainability coverage of the companies over the period could be explained with the general rise of attention sustainability (especially environmental issues) got in the media (Holt & Barkemeyer, 2012; Fischer et al., 2017; Barkemeyer et al., 2018). However, it is difficult to prove that it is the cause in this particular case, as only the rise in absolute numbers of media articles can be noted, and there is no practical way to do any comparison (relative to overall sustainability coverage or overall company coverage). Majority of the articles analysed in this were published by *The Financial Times*. The logic of this interest could be in the fact that both of the companies are very important businesses on both national and international scale, with lots of investors and potential investors, and that *The Financial*

Times readers are very much interested in knowing day-to-day and long-term performance of the companies (Chan & Goldthorpe, 2007). However, the difference in the number of the published articles is not significant enough to claim that business or the industry press were more inclined to write about sustainability than regular press. Another important feature is that more articles were published about *GlaxoSmithKline* then *AstraZeneca*. This difference could be explained by the fact that *GlaxoSmithKline* is, despite overall similarities between the companies, bigger, richer and globally more engaged company.

In the process of agenda-setting and framing, the newspapers were shaping different public discourses and creating common knowledge or universally accepted realities. This both refers to the realities that were omitted or underrepresented despite the overall expectance of high focus on them, and the realities that were heavily focused on despite the possible expectations of its lower frequency. This reveals that the mainstream printed media had slightly different opinions than both the general public and the companies in question, and that their agenda-setting powers were used to find a spot somewhere in between those expectations, so that the overall understanding of the salient and important sustainability issues would be greater on all sides. This is especially noticeable when newspaper articles are compared with corporate materials – press releases, CSR and ESG reports and social media posts. Salience of sustainability was not dictated by the companies; the newspapers were the ones that were setting the agenda and forcing companies to react and even change their approach.

Focus on the companies' core business – their products and relationships with their most important stakeholders, is reflected in the way the newspapers understood and praised the significance of their product and what benefits they bring to the entire world. This is fairly easy to comprehend as literally everyone uses some of their products, to save their lives or to improve them. Thus, the sustainability was identified as a mean of continuation or even improvement of the companies' abilities to resume to do what they were already doing, basically not challenging the dominant frames of neoliberalism and neoliberal perspective on sustainability (Boykoff, 2008; Diprose et al., 2018). In this sense, being more sustainable means being able to improve products (new, more efficient, safer medicines, etc.) and expand the pool of customers (cheaper and more accessible medicines). The newspapers were balancing between two perspectives – instrumental perspective of the companies, that stated that they were a business and for-profit organizations, and the moralistic perspective held by many other stakeholders, that health is not something to be profited from. The role the newspapers undertook was to acknowledge both perspectives as legitimate and to try to find a ground for connection and more harmonious relationship (Entman, 1993; Clemente & Gabbioneta, 2017), in order to achieve improved outcomes for everyone (the 'win-win' paradigm) (Vogel, 2005). Thus, other distinct frames were focusing precisely on that – relationships among stakeholders and communication and cooperation between them. The importance, quality and intensity of these relationships determined the overall significance of the companies and the industry in general – in economic, social and political spheres.

Opposed to the widely accepted presumption by both researchers and the general public that the core or origin of sustainability considerations lies in the concerns for preservation and protection of the natural environment, the research shows that there was a lack of focus on environmental sustainability by the press (Basiago, 1995; Robinson, 2004). Despite environmental issues occasionally being reported, there is no strong evidence that these reports developed into an important and well-developed theme that would have had a significant effect on the general public and their understanding and perception of sustainability in the pharmaceutical industry. First, the sheer number of articles that dealt with the topic of environmentalism in the context of sustainability was very small. Environmental considerations were just a footnote, often mentioned casually or as an appendix to other more salient issues. Secondly, the overall impression is that the environmental records, policies or initiatives of the companies are not being seriously questioned, discussed and analysed. The positive environmental initiatives are being just briefly commented or praised, but without any deeper consideration or challenge. Important environmental questions were not being asked, with a hint that the silence was almost very loud. There are few ways in which this could be explained, but the most logical one, and the one that is in accordance with other findings of this study, is that the socioeconomic, scientific and political significance of the analysed pharmaceutical companies (and industry in general) is such that certain leniency has developed over their environmental performance and that the externalities produced by the pharmaceutical industry would be more easily accepted and understood. The importance of their product was just too great for the press (or general public) to be too upset about the natural environment, especially considering the fact that the industry itself was not hiding from it or trying to neglect it. Simply, other issues were more important and the fact that the press has limited resources to set the agenda had put the environmental dimension of sustainability on the margins. This finding tallies with prior research that has found that in other means of communication between the companies and the stakeholders (such as annual and sustainability reports) the social dimension of corporate performance is also prioritized over its environmental dimension (Fonseca & Carvalho, 2019; Kolsi et al., 2021).

7. Chapter 7 – Study 3 – Media Representations of Sustainability in the Pharmaceutical Industry: A Storylines Perspective

7.1 Introduction

In recent years, sustainability has become a major societal concern (Ader, 1995; Basiago, 1995; Goodland, 1995; Robinson, 2004; Bansal & Song, 2017). In principle, there is now widespread support for a transition towards more sustainable production and consumption systems that transcends social and political boundaries (Gladwin, Kennelly & Krause, 1995; Wilkinson, Hill & Gollan, 2001; Dyllick & Hockerts, 2002; Lubin & Esty, 2010). There is also widespread agreement that this transition will not be achieved without participation of the private sector (George et al., 2016b). In turn, the uptake of corporate sustainability practices has been patchy, but – to varying degrees – many companies have responded proactively, viewing sustainability either on normative grounds or as a source of competitive advantage (Vogel, 2005). Companies are embedded in increasingly complex governance systems that combine command and control with a variety of voluntary, market-based elements (Vogel, 2010; Bartley, 2014). This 'market for virtue' (Vogel, 2005) shifts significant responsibility to stakeholders and, most notably, conscious consumers (Heikkurinen et al., 2019): through their purchasing decisions, conscious consumers are expected to reward good sustainability performance and to sanction poor sustainability performance (Lu et al., 2023), hence nudging companies onwards in the transition to sustainability.

To fulfil this role, consumers need to have a sufficiently detailed understanding of the sustainability impacts of their consumption decisions. Likewise, other stakeholders need sufficient information to be able to act upon. To some degree, stakeholder decision making can be informed by personal experience or direct communication with the company, e.g. in the shape of product information or corporate sustainability reporting

(Brammer & Pavelin, 2008). More frequently, however, this type of information is provided by third-party social evaluators (Pollock et al., 2019) such as ESG information providers (van Duuren et al., 2016), standardization bodies (van Amstel et al., 2008) or the mass media (Graf-Vlachy et al., 2020). Among these, the mass media arguably occupy a central position given their reach into the general public and their agenda-setting potential (McCombs, 2004). Extant research has found media representations to play a significant role in the formation of corporate reputation (Chandler et al., 2019), for example in the wake of corporate wrongdoing (Zavyalova et al., 2012; Han et al., 2023).

It is important to note that even though the mass media, and news media in particular, are commonly expected to be neutral and un-interventional (Sheng & Lan, 2019), they do not merely passively transmit information. Instead, whether and how a news event is covered by the media depends on a variety of factors, including journalistic norms such as novelty or balance (Boykoff & Boykoff, 2007); or characteristics of an outlet such as circulation, political alignment, or editorial policy (Bednar, 2012; Lovelace et al., 2022; Oliver et al., 2023). It follows that media representations of corporate sustainability will also be impacted by these processes which, in turn, determine how and to what extent stakeholders learn about the sustainability performance of a given company. This is precisely where this study is positioned.

The study, as a part of a wider research, reports on a qualitative discourse analysis of media representations of sustainability related to two UK-based pharmaceutical companies (*GlaxoSmithKline* and *AstraZeneca*). The pharmaceutical industry is interesting and suitable in this context as it forms an extreme case, with stakeholders almost exclusively relying on the mass media to form their opinion on these companies. The analysis is centred on the theoretical concept of storylines, i.e. condensed narrative forms in which different metaphors, analogies, clichés and references are used in discussions as tokens or symbols (Hajer, 1993; Hajer & Versteeg, 2005; Osmundsen &

Olsen, 2017; Baulenas et al., 2023), through which elements from different fields can be combined to provide actors with a set of symbolic references that suggest a common understanding (Hajer, 1995; Else et al., 2022). Storylines are used to define the problem, propose the solutions, and distribute responsibility and guilt, as well as label different actors with different characteristics and assuming roles. In the particular context related to sustainability in the pharmaceutical sector, the mass media frame both the corporate actions, strategies and policies and the stakeholders' opinions and reactions into dominant storylines for the purpose of alignment, reapproaching and, ultimately, better understanding, communication, and cooperation. In this process, different mechanisms were used, some standard journalistic norms and literary devices, but also others that were particularly suitable for the context. Thus, the two main research questions this study are: 1) What are the dominant storylines in the media discourse about sustainability in the pharmaceutical industry? and 2) What are the main storyline-building mechanisms and when and how are they used?

This study finds that the media representations of sustainability in the pharmaceutical industry converge upon three dominant and reoccurring storylines: 1) Moral superiority barrier; 2) Business logic barrier and 3) Leadership in mediating confrontation. All three identified storylines are built by using different literary and logical tools characteristic for mediated discourses, but some are also seen as dominant, reoccurring and particularly suitable for building the specific storylines, in a specific setting and context. For the first storyline, the characteristic mechanisms were those that focused on corporate engagement and commitment rather than impact and those that emphasized the necessity for companies to adhere to business logic in order to be successful and fulfil their main role. The second storyline was supported by three extensively used and reoccurring mechanisms – anonymised critique, emotional plea and channelling the criticism of well-known individuals and organisations. The third storyline relies on media clearly acknowledging its leadership role in mediation process and using the suitable language emphasizing certainty and confidence.

The study, as a part of a wider research, makes three main contributions to the extant existing literature. First, as an empirical contribution, it uncovers dominant storylines and storyline-building mechanisms, providing pointers regarding public understanding of sustainability in the context of the pharmaceutical industry. Second, backing the main theoretical contribution, the study explores the business-media-stakeholder nexus and demonstrates how media representations of corporate sustainability largely reflect stable narratives which are not immediately sustainability performance-related. As a direct consequence, this severely restricts the media in their function as social evaluators (George et al., 2016b; Pollock et al., 2019) and, in turn, limits the ability of stakeholders to discriminate between good and bad sustainability performance. Third, as a methodological contribution, it provides a protocol to extract storylines and storyline-building mechanisms from unstructured text, thereby specifying and refining prior work by Hajer (1995) as well as Osmundsen and Olsen (2017).

The remainder of this study is structured as follows. In the next section, the brief review of the literatures on corporate sustainability, media agenda-setting and the concept of storylines as the theoretical positioning of the research is provided. Following that, the UK pharmaceutical industry as the research setting is explained and, subsequently, the research design of the study is described and justified. In the following section, the main findings are presented, structured by the main storylines and underlying mechanisms that have been identified. The study subsequently discusses the findings in light of the extant literature, while the conclusion, with the presentation of a set of implications for policy and practice is given in the Chapter 9 of the thesis.

7.2 Theoretical considerations

Sustainability and sustainable development, despite their wide scope and ambiguity, are widely used terms that capture different ways of dealing with a wide range of ecological and societal challenges the modern world is facing (Dresner, 2008). Originating in the environmental discourse, mostly concerned with issues such as pollution, natural resource usage, climate change and loss of biodiversity, it gradually expanded to also cover various social issues such as human rights, gender equality or access to resources, but also economic issues such as long-term economic development, supply chain reliability, etc. (McKenzie, 2004; George et al., 2016b). Even if it is not a precisely defined paradigm, the idea of sustainability lies in the fact that universally accepted ways of production, consumption, redistribution, and social interaction are inefficient and harmful and that in the long run they lead to irreparable deterioration of both the natural environment and crucial social institutions (Basiago, 1995; Robinson, 2004). Thus, all the economic, social, and political actors are expected to change their behaviour and become 'more sustainable' – "to meet the needs of our generation without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 16).

Being an important social and political movement, sustainability greatly affects businesses, as they are often seen as entities that cause most of the environmental problems (Goodland, 1995; Wilkinson, Hill & Gollan, 2001). The pressure on businesses to be more sustainable comes not just from the governmental and political actors, but from all of their stakeholders, including the customers, as they have the ability to either punish or reward companies depending on their sustainability performance (Dyllick & Hockerts, 2002; Lubin & Esty, 2010). Sustainability is, thus, much more than just a buzzword scattered throughout the societal and organisational discourse, and it is seen and understood differently by other stakeholders (Egan, 2019; Else, Choudhary &

Genovese, 2022), but, in general, company's stakeholders almost always consider it as a positive corporate activity (Morsing, 2017). Businesses are therefore encouraged and even pressured to undergo the sustainable transformation, a process in which they can gain a lot of tangible (better resource management, product efficiency, cost savings, etc.) and intangible (reputation, trust, access to talent, access to new markets, etc.) benefits (Sen & Bhattacharya, 2001; Barkemeyer et al., 2014; Bartikowski & Berens, 2021). The vast majority of businesses recognize these necessities and opportunities and are, more or less, strategizing and implementing various policies and projects of sustainable development transformation, carefully weighing their costs and the benefits (Gladwin, Kennelly & Krause, 1995; Wilkinson, Hill & Gollan, 2001; van Marrewijk, 2003).

7.2.1 Mass media and the influence on the public discourse

Companies need to not only step up their sustainability engagement, but also to communicate this engagement to their stakeholders (Morsing & Schultz, 2006; Hutt, 2010; Barkemeyer, Preuss & Lee, 2015; Pérez-López, Moreno-Romero & Barkemeyer, 2015). Communication is an essential part of the sustainable transformation of the businesses, as the access to the information not only improves the corporate reputation and trustworthiness but also provides them with the precious feedback that can make their efforts even more efficient and valuable (Christensen & Cheney, 2011; Esmann Andersen & Høvring, 2020). However, the communication of corporate sustainability is far from trivial (Du, Bhattacharya & Sen, 2010; Herzig & Schaltegger, 2011; Golob & Podnar, 2014). Corporate annual, sustainability and ESG reports are valuable and detailed source of information. Yet, despite the fact they are widely available for everyone to access (usually on the corporate websites), they are produced for and disseminated to a narrow and already engaged audience (Bose, 2020). Similarly, despite the huge potential and the possible access to a very wide audience, businesses usually fail to fully utilise the possibilities of interaction and engagement via social networks, especially related to the issues that are not identified as a core part of the business (Barkemeyer et al., 2020; Pizzi et al., 2021).

It is easier for some sectors and companies to establish a good communication and the working relationship with the stakeholders, but for the others it is more difficult – for example, the sectors and companies that are detached from their customers, that are not allowed to advertise and that do not have regular and popular avenues of disseminating their plans, strategies, and outputs (Wanderley et al., 2008). This is even more complicated when the companies need to communicate about the issues that are not in their primary focus, such as sustainability (Morsing, 2017; Else, Choudhary & Genovese, 2022). Pharmaceuticals is an example of such a sector. Thus, the sustainability discourses of certain companies and of their stakeholders can be very different and there is a need for an agent that would either mitigate the divergence of the standpoints or even mediate a common or joint discourse, acting as both the social evaluator and social influencer. One of such possible agents are mainstream media outlets.

The rise of literacy and mass media signalled the emergence of the modern societies, as one of the prerequisites for people successfully navigating through life and making important choices is being properly informed. Thus, the mass media and how they understand, process and report on the events are crucial for the functioning of every society (McCombs & Shaw, 1972; Puglisi & Snyder Jr, 2011). Media are assigned with different tasks: 1) To act as a forum, allowing the stakeholders to communicate and exchange ideas; 2) To act as a mobilizing agent, encouraging the stakeholders to act; and 3) To act as a watchdog, enforcing the democratic control over the social processes (Norris, 2000; Greve, Palmer & Pozner, 2010). The media, in a way, shape the social and political reality, forcing the attention to the certain issues and building the public images (Deephouse, 2000; Lang & Lang, 2009; Roulet & Clemente, 2018). The most important features of the modern mass media are the power to set the agenda and determine the salience of certain topics (Entman, 1993; Clemente & Gabbioneta, 2017) and to frame the events and issues in a certain way – "promoting a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described" (Entman, 1993, p. 52). While the media agenda-setting and framing may not be able to change the individual opinions about a certain issue, it has an impact on their perception of the collective salience of the issue and the dominant view which prevails within their communities (Sheng & Lan, 2019). In addition to acting as an agent which reports on the reality, the mass media are one of the information systems that are involved in shaping the opinions and affecting the people's behaviour and social actions. Thus, the media frames tend to diagnose, evaluate, and prescribe (Gamson, 1992; George et al., 2016a).

The media representations of organizations are essentially dramatized and simplified and will often be either vilifying or celebrating (Roulet & Clemente, 2018). As the mass media play a powerful role in setting the agenda of the public discourse and directing it, all the stakeholders involved with the media have potentially a lot to gain or to lose (McQuail, 1985). This goes back to the one of the foundations of the stakeholder theory, at least to the normative view of stakeholder relations – that some actors, depending on their motives and actions, are perceived as morally superior or inferior to others, and, thus, their viewpoints and actions have higher ethical value (Langtry, 1994; Gibson, 2000; Phillips, Freeman & Wicks, 2003). For businesses, the positive media representation can provide firms with access to critical resources (human capital, markets, etc.) and strategic opportunities, while negative responses lead to the stakeholder pressure (Rindova, Pollock & Hayward, 2006). Media coverage is often the main legitimate source for reducing the information asymmetries about the corporate actions (Deephouse, 2000; Graf-Vlachy et al., 2020) and media coverage can thus represent an important strategic asset that can significantly influence the performance and valuation of firms.

7.2.2 Discourse coalitions and the concept of storylines

Apart from having the influence on which problems, issues and actors are going to be in the public focus and how those problems, issues and actors are going to be portrayed, the mass media are often engaged in even more important social role, especially regarding the problems of high social importance, such as sustainability. Media attention is typically seen as a precursor of or even a proxy for public attention (Barkemeyer et al., 2020) and the way the media present a certain issue or a problem strongly influences how the general public is going to understand it too (Griffith Oliver et al., 2023). In a situation when there is a structural inability for efficient communication and understanding between the different actors, the mass media can assume the role of an agent that facilitates rapprochement. In contrast to corporate communication, investigations by the mass media are expected to be neutral and un-interventional (Sheng & Lan, 2019). The media will be inclined to portray the corporate actions in a more accurate and comprehensive way than does the firm itself and thus depict a community-based view of reality (Cardon, Stevens & Potter, 2011) and thus play an important role in shaping and validating the corporate legitimacy (Barkemeyer et al., 2020).

Discourse coalition is a theoretical concept introduced by Hajer (1993) and it assumes that the societal problems are socially constructed and that the very perception if something is a problem or not depends on the narrative in which it is portrayed and where the understanding can be sought through uncovering many individual interpretations of the same complex issue (Hajer, 1995). As different actors have different interests, the narratives they accept and use are obviously different, thus manifesting the existence of different realities. When a group of actors share the same or similar view on a social construct, they tend to create a discourse coalition, so they could be better suited to impose their views on reality on others (Hajer, 1993; Alvarado et al., 2021). By discourse, Hajer means the "an ensemble of ideas, concepts, and categories through which the meaning is given to phenomena" and a coalition is defined as a group of actors who share a social construct (Hajer, 1993, p. 45). The dominant discourse is the one that starts to dominate the way a society conceptualizes the world (Hajer & Versteeg, 2005).

As the development and imposition of the new discourses create change in the people's perceptions of problems and potential solutions, the actors try hard to develop clear, consistent, and powerful images that could serve as their building blocks (Osmundsen & Olsen, 2017). One of the most important tools of discourse forming is the creation and development of storylines. Gamson and Modigliani (1989) present a storyline as a synonym to a frame – central organising idea that provides meaning to an unfolding strip of events; while others use it to refer to as a fragment of a narrative (Schäfer & O'Neill, 2017). However, Hajer (1993; 2005) and other discourse analysis scholars have developed the idea in more detail. They define storylines as condensed forms of narrative in which different metaphors, analogies, clichés, and references are used in discussions as 'tokens' or 'symbols' (Osmundsen & Olsen, 2017) or 'emblems' (Cotton, Rattle & Van Alstine, 2014). They are the concentrated narratives on social reality through which the elements from many different domains are combined and which provide actors with a set of symbolic references that suggest a common understanding (Hajer, 1995; Else, Choudhary & Genovese, 2022). By using storylines, it is fairly easy to define the problem, propose the solutions and distribute the responsibility and guilt, as well as label the different actors with different characteristics and assuming roles (victims, villains, etc.), and also evaluate their morality and legitimacy. This is in consistence with the notion that the media coverage is not simply a reflection of its subjects but is also socially constructed (Griffith Oliver et al., 2023), with significant assignment of the affective attributes to actors (Kiousis, 2004; Sheng & Lan, 2019).

The main characteristic of storylines is that the overall complexity of reality is reduced so that it could serve as a simplified narrative many actors can align with

(Osmundsen & Olsen, 2017). Through the process of creating and maintaining storylines, the actors choose between different economic, social, or moral arguments (Hajer, 1993). The process of the construction of the storylines inevitably involves making ethical choices, and those choices are made by agents who reassess and reexamine their values (Shepherd, 2019). The establishment of the dominant storylines provides them with political momentum and power (Hajer, 2009; Osmundsen & Olsen, 2017), as the dominant storylines tend to be accepted and taken for granted by the general public. Hence, they have the potential to become institutionalized (Hajer, 1993) and what can be seen as a common sense of the epoch (Barkemeyer et al., 2020; Else, Choudhary & Genovese, 2022).

Storylines are being used in order to create consensus among different actors in order to facilitate rapprochement between them, so that a narrative harmony could be established as a prerequisite for cooperation. When it comes to sustainability issues and problems, the theoretical lens of storylines has mostly been used to explain the creation of discourse coalitions in the fields of public policy (Hajer, 1993; Hajer, 1995; Hajer & Versteeg, 2005; Cotton, Rattle & Van Alstine, 2014) or scientific community (Shepherd, 2019; Baulenas et al., 2023). For example, Hajer (1993) examined the role of storylines in the process of fabrication of multi-actor consensus related to environmental issues regarding British pollution policies. He determined that there was a major shift in 1980s and 1990s from pragmatic discourse that was based on the assumption that economic development required the acceptance of certain level of environmental degradation, to the discourse of ecological modernization, with sustainable development as a central storyline legitimizing policy changes. When it comes to the environmental science, the concept of storylines was mostly used to address the issues of epistemic uncertainty (Shepherd, 2019). For example, Shepherd (2019) states that storylines have the power to reframe the environmental risk studies from positivistic, scenario-driven approaches that may not deliver clear answers and suggestions, to providing self-consistent, plausible pathways that could present the possible future developments, depending on the intervention, thus encouraging decision-making under uncertainty. This approach tackles the issue of divergence between what scientists think might be useful and what is actually applicable in practice (Dilling & Lemos, 2011; Baulenas et al., 2023). However, apart from policy making and scientific analysis, the concept of storylines was not very much used in sustainability studies. There is a room for examination of this notion, especially in the context of the sustainable transformation of businesses and the media representation of those processes, and this particular study positions itself in this gap.

The storylines are being created by actors using different tools and mechanisms characteristic for the mediated discourse – metaphors, symbols, clichés and other rhetorical devices, logical devices, and fallacies, as well as different journalistic micro-practices and norms (Hajer, 2009; Osmundsen & Olsen, 2017). As storylines can be described as a descriptive self-consistent unfolding of past and present events, or of plausible future events or pathways (Shepherd et al., 2018; Ciullo et al., 2021), the very process of storyline-building is very much like a process of creation and dissemination of any narrative. In this process, the media rely on standard norms accepted within the journalism profession, like objectivity, fairness, accuracy, and balance (Bennett, 1996), but also utilize different tools applicable and appropriate for the context and for reaching the desired effect (Johnson-Cartee, 2005). Metaphors, symbols, clichés and other rhetorical concepts and communicative tools are used to create the consistent, coherent, and powerful images that provide a common ground between the various discourses (Osmundsen & Olsen, 2017).

When it comes to rhetorical effects and other tools of communication, there is a very vast scholarship that deals with almost all aspects of it – the linguistic side, cognitive side, socioeconomic side, etc. Within the cognitive science tradition, the usage of rhetorical effects had been mostly analysed from the informational and heuristic perspectives – as tools for disseminating and understanding different types of knowledge (Skorczynska & Deignan, 2006). Recently, the re-examination of social aspects of rhetorical devices usage is on the rise, especially their ideological significance (Koller, 2004). The choice of particular linguistic tools is driven by the intention to persuade the audience (Koller, 2004; Skorczynska & Deignan, 2006). The different ways the communicative tools are being used is attributed to three parameters: 1) How different the text readers are; 2) How cognitive challenging the subject matter is; and 3) What is the form of the medium (Cameron & Low, 2004). It is also widely accepted that linguistic tools are negotiated by the participants (Cameron, 2003) and that usage is heavily influenced by culture (Kövecses, 2005). Thus, as the process of establishing the dominant and accepted storylines in the sustainability domain could be seen as a collective sense-making process (Linnér & Wibeck, 2020), it is necessary for those who are shaping the storylines to use communicative tools and rhetorical devices that are suitable for all the actors to comprehend (taking into account their cognitive, educational, social, economic and contextual limitations), as well as to use communicative tools that are aligned with (or, to be more precise, that are not aligned against) their values and emotional investments (Renzi et al., 2017). When it comes to the specific context of storylines that had emerged in the media in the process of bringing closer together the actors in the field of healthcare and that are related to sustainability, some rhetorical devices are more suitable and effective than others. This study is positioned to explore that gap.

The theoretical concept presumes that related to any problem or an issue worthy of public scrutiny, the different actors will push for creating and disseminating the storylines that would fit and serve their interests, trying to persuade the others in the validity of their positions and recruit them for their cause (Esmann Andersen & Høvring, 2020). The powerful actors with the coherent and recognizable storylines would be thus able to create and maintain the discourse coalitions with other actors, transforming the common-sense narratives into societal and political legitimacy and power to act (Ransome, 2010; Else, Choudhary & Genovese, 2022). However, this study assumes that the sustainability discourse, especially in the context of the pharmaceutical industry, is far too complex to develop as a result of the natural communication and interaction between interested actors. At the same time, as sustainability is universally accepted as an important societal issue, the mainstream mass media assume not just the role of an institution which is to provide a platform for communication, but also of an institution which should have the capacity to override the structured inability of the actors to align their narratives into the dominant discourse and create the discourse coalitions. In essence, in addition to deciding about the salience of the topics and the ways they are framed, the mainstream mass media also create the overall dominant logics or keys in which the issues and topics should be read and understood. By doing so, the mass media facilitate the process of assembling the widest possible discourse coalition regarding sustainability and sustainable development, in which the storylines that the media create and present ought to be accepted as common sense by all the actors.

This study, as a part of the wider research effort, is focused on two key issues. First, by the means of discourse analysis, the goal is to identify and analyse the main (or dominant) media storylines that facilitate rapprochement between the businesses (in the particular case, the British mainstream print mass media and the selected pharmaceutical companies, *AstraZeneca* and *GlaxoSmithKline*) and other actors (the patients, governments, regulators, medical professionals, etc.) and create the dominant discourses and discourse coalitions around the issues of sustainability in the pharmaceutical sector. Second, within the storyline context, the goal is to identify and analyse the different mechanisms of building storylines, including different journalistic norms, micro-practices, and communicational/rhetorical/logical devices, but with special focus on the ones that are dominant and most widely used in a specific (sustainability in pharma) context.

7.3. Research setting – The specificities of the pharmaceutical sector

This study of the dominant storylines in the mainstream printed media regarding sustainability in business is embedded in a very specific research setting, namely the pharmaceutical sector. For some businesses and companies, it is fairly easy to communicate their sustainability because they either have close contact with their stakeholders and they have access to means of communication, or the very nature of their business is such that sustainability is a big part of it (Banerjee, Iyer & Kashyap, 2003). The pharmaceutical industry, although not homogenous in its characteristics on global level, has a certain set of universal traits that make it rather specific compared to others, which especially influences the range and quality of the communication between the companies (industry) and their stakeholders.

First, on global level, the pharmaceutical sector is economically very important, the leading companies are huge in terms of capitalisation, revenues, profits, employment, and investments (Pisani & Meadows, 2019; Ostwald et al., 2020). Second, for some countries (including the UK), the pharmaceutical sector represents a strategic industry, with much of economic, social, and even political stability depending on it. Thus, the pharmaceutical companies profoundly influence the overall local corporate landscape, culture, and philosophy (Gambardella, Orsenigo & Pammolli, 2001). Third, the pharmaceutical sector's wider social significance is acknowledged not just by the fact that they research, develop, produce and distribute an incredibly important product (as everyone use medicines that save lives or improve the quality of it) (Goldacre, 2012), but also by their investment in research and education and the positive contribution to the overall scientific base (ABPI, 2016). Fourth, in its core, the pharmaceutical industry is very much reliant on processing chemicals and, thus, a significant polluter (Veleva et al., 2003; Belkhir & Elmeligi, 2018). Finally, the very nature of their product is such that the industry is heavily regulated, monitored and that there are many gatekeepers between the companies and the final users of their products – the patients (Abraham & Lewis, 2000; Abraham & Lawton Smith, 2003).

There are different barriers between the pharmaceutical companies and their final customers (the patients). Usually, the government or another healthcare regulator decides whether a particular medicine is safe and efficient enough to be introduced to the market and whether it would be available to the majority of patients, as they are the ones responsible for the financing of the healthcare sector (Williams, Gabe & Davis, 2009). In addition, for most of the medications, it is the doctor (or another medical professional) who decides if a particular medicine is the right treatment for a particular patient. In most of the countries, it is illegal for pharmaceutical companies to advertise prescription medicines (Dukes, 2006). This very formalised and structured system has interesting consequences. Most of the pharmaceutical companies have lots of difficulties to communicate with other stakeholders, especially the customers. In regular market conditions, companies would be able to advertise their products and thus influence the perceptions of their stakeholders. Inability to use regular marketing strategies leaves pharmaceutical companies with rather inefficient pathways of communication. Annual, sustainability and ESG reports exist but they are limited in reach and generally designed for an already informed and interested audience (Bose, 2020). The social media presence and reach of pharmaceutical companies is, for various reasons, inefficient.

The circumstances mentioned above lead to an interesting setting. Despite being huge, rich, powerful and important on both local and global levels, the pharmaceutical companies and industry in general are relatively unknown to the general public. In such a situation, where a company is practically incapable to assert its positions and viewpoints to the other stakeholders directly, the importance of mainstream media as social evaluators and social influencers, and their agenda-setting, framing and storyline-building become even more important. Thus, the pharmaceutical sector is an ideal setting for the research.

7.4 Research methods

This study represents an argumentative discourse analysis (Schäfer & O'Neill, 2017) of the selected British mainstream newspapers' articles dealing with sustainability related to the specifically selected pharmaceutical companies. It is a part of a wider research about the social evaluator and social influencer role of media, their agenda-setting and framing of sustainability in British pharmaceutical sector in the period between 2000 and 2020. Two British companies are selected for the analysis, *AstraZeneca* and *GlaxoSmithKline*, both UK-based and important for the overall British business landscape. The temporal starting point of the research is set to 2000 because both companies, as we know them today, were created by merger at that point in time and also because at that time the concept of sustainability started to gain media recognition and importance. The end point is 2020 because of the outbreak of the Covid-19 pandemic, which to significant extent distorted the usual sustainability discourses and pushed the media to reframe them in a very specific (Covid-19) context. The 20-year temporal period is also necessary so that a significant number of articles could be accumulated for the analysis, but also to see if there were any changes in the storylines over time. Single-country geographical setting (UK) was chosen with the assumption that, although both companies are global, the issues such as sustainability would be discussed in more depth and with greater engagement of the stakeholders in a country that is the companies' base.

As the source of the data, mainstream British newspapers *The Guardian* and *The Times* (including their Sunday editions, *The Observer* and *The Sunday Times*), financial newspapers *The Financial Times* and the industry outlet *The Pharma Letter* were selected. The reason for this is the fact that these newspapers do write about corporate sustainability in meaningful and analytical matter, exploring different perspectives and viewpoints, unlike the boulevard press, that would only be interested to report on scandals (Boykoff & Mansfield, 2008; Doulton & Brown, 2009; Koteyko, 2012; Barkemeyer, Givry & Figge, 2018; Diprose et al., 2018; Barkemeyer et al., 2020). The articles were sought for using the *Nexis* database by searching for terms "company" (both long names and abbreviations, for example "*AstraZeneca*" and "*AZ*") + "sustainab*". In addition, to expand and diversify the source base, we also used corporate annual and sustainability/ESG reports, as well as corporate press releases. A total of 477 newspaper articles were found (after an initial check and removal of irrelevant ones), 281 corporate press releases and 169 annual/sustainability/ESG reports and similar releases.

Open and axial coding with the help of qualitative analysis software (*ATLAS.ti*) was used. Different storylines related to dominant discourses about sustainability in pharma, as well as different tools and mechanisms employed in the process of their creation and promotion, were searched, classified, identified, and analysed. In the first reading, the combination of the codes devised and systematized in a code list that emerged from reading the literature and the grounded inductive approach was used, that enabled adding new codes to the code list if the necessity was seen and recognized it in the text. First-order codes were related to: 1) Stakeholders mentioned in the text (for example: company, sector, patients, medical professionals, NGOs, etc.); 2) The sustainability-related issues that was reported on (environmental, social or economic), and for this the more sophisticated grid of 17 SDGs (Walker, Pekmezovic & Walker, 2019) was used; 3) Evaluation of the issues and actions by the stakeholders (positive, negative or neutral); and 4) Whether the article itself was focused on sustainability related issues and problems or they were mentioned casually. In the second reading, by combining the first-order codes, the possibility emerged to capture main discourses that were identified in the text and also the main storylines. Finally, the third reading that focused explicitly on the dominant storylines, proceeded to the identification of the tools and mechanisms used in their creation and to distinguishing the ones that were not standard literary devices, but tools and mechanisms specifically suitable for building the dominant storylines about sustainability and sustainable development related to selected pharmaceutical companies.

7.5 Findings - dominant storylines and storyline building mechanisms

The process of discourse analysis of the mainstream newspaper articles related to selected pharma companies and sustainability enabled researchers to spot and identify many different emerging issues, problems and discourses (such as drug prices and availability; high focus on core business issues and low focus on the environmental dimension; social, economic and political significance of pharma; importance of communication and cooperation between stakeholders, and corporate leadership as drivers of sustainability), however, the main goal of the research was to identify dominant storylines, seen as crucial logical keys or lenses through which all the different issues, problems and discourses are to be read, understood and accepted. The study managed to identify three dominant and reoccurring storylines: 1) Moral superiority barrier; 2) Business logic barrier and 3) Leadership in mediating confrontation. All three identified storylines are built by using different literary and logical tools characteristic for mediated discourses, but some are also seen as dominant, reoccurring and particularly suitable for building the specific storylines.

7.5.1 Storyline 1 – Moral superiority barrier

Many sustainability issues and problems tend to emphasize the existing imbalance of power between the pharmaceutical industry on one side and most of the other stakeholders on the other, as well as their confronted ethical positions. For example, making profits from people being sick (a very simplified and emotional view of pharmaceutical business model) is almost by default seen as ethically dubious by some other stakeholders (for example, patients) and having access to medicines regardless of material means is seen as a positive thing and ethically superior position to support. Thus, in a simplified clash of these two discourses, the one based on a higher moral authority would automatically be dominant in the general public (as far more people are patients or potential patients than somehow involved with the pharmaceutical sector). The media acknowledge this moral superiority (or disbalance of ethical starting positions) but assume the stand that normalisation of that type of discourse delegitimises the very existence of the pharmaceutical industry, disabling the possibility of sustainable transformation and advancement. The media assume the role to defend the pharmaceutical companies, their ethos and strategies in order to put things back into balance. Related to this dominant storyline, two reoccurring mechanisms are noticed, which are named: 1) 'It is about engagement and commitment and not about impact'; 2) 'After all, they are a business'.

7.5.1.1 'It is about engagement and commitment and not about impact'

One of the storylines building mechanisms used very frequently in the newspaper articles are those that are defending the pharmaceutical companies and their positions and actions on the basis that it is more important and relevant to focus on their intentions and commitments, rather than actual actions and results. This is, for example, obvious when some stakeholders criticise the fact that companies have been acknowledged as sustainable or environmentally friendly by different media outlets, or given good sustainability ratings by ranking agencies, despite existing controversies. For example, responding to the widespread criticisms that both *AstraZeneca* and *GlaxoSmithKline* were listed on *FTSE4Good* index despite various controversies surrounding both firms, especially regarding drug availability and prices in LDCs, *The Guardian* wrote: "*FTSE4Good* indices concentrate on companies with established policies to improve their performance in three key areas: environmental sustainability, human rights, and stakeholder rights. It is a measure of corporate engagement, not impact, an index of responsibility and commitment to show which companies are really serious about addressing the problems." (Insley, 2001) Another good example is *Morley Fund Management* and their *Sustainability Matrix*, about which it was written that "… the firm insists that its 'sustainability matrix' is not just a blacklist, arguing it is used as a tool to encourage management to change their practices." (Gimbel & Mawson, 2002)

This defensive mechanism assumes that other stakeholders are not properly informed about what companies do or stand for, unlike media or rating agencies: "This study is different in setting aside the usual ethical question of 'who are the best corporate citizens?'. Instead, it looks at the long-term trends in the environment and society and offers a view on which companies will have a sustainable business model in a world tested by pollution, resource depletion and demographic change" (Anonymous, 2010). Thus, the explanations of the companies' commitments and activities are often quite extensive. Defending the high positioning of *GlaxoSmithKline* on the list of responsible companies made by *Access to Medicine Foundation* (an influential NGO), *The Financial Times* reported: "The findings suggest that companies' greatest efforts have been on introducing equitable pricing of their medicines to the poor, and prioritising access. Industry-wide, they are also involved in drug donations, other philanthropic activities and flexible approaches to patents. They score least strongly for researching 'neglected' diseases, suitable manufacturing and lobbying. The results also reveal that most European pharmaceutical companies – led by *GlaxoSmithKline* – are far more actively involved in access to medicines issues than their US peers" (Jack, 2008). Depending on the particular issue and the assessment of how well acquainted the general population is about it, the media employs this mechanism subtly (by a particular and very subtle wording), for example describing: "… CSR as 'a wide-ranging agenda that involves businesses looking at how to improve their social, environmental and local economic impact, their influence on society, social cohesion, human rights and fair trade" (Cowe, 2001) or not so subtly: "We recognise the interpretation of ethical and environmental investment is subjective" (Collinson, 2010) and "… no company attempting to be purposed pulls it off completely; the key is to try, and build the systems to make it happen - and it is this commitment that contributes to improved performance" (Hutton, 2016).

7.5.1.2 'After all, they are a business'

Another storyline-building mechanism that is often invoked when the balance is disturbed in favour of the side that is critical over companies' sustainability performance or tactics is a sort of reductionist reminder that the main purpose of pharmaceutical companies is still a commercial one and that all other duties and obligations cannot be done on the expense of their core business objectives. This resonates the old 'shareholder vs. stakeholder' debate (Elkington, 1997; Kim & Nofsinger, 2007), but to the point of extreme in which those who criticise the pharmaceutical companies believe the stakeholders and their interests are more important than shareholders'. The root of this disbalance lies in the perception of many stakeholders that there is a sort of moral corruption in the very essence of pharmaceutical business – that they are making profits from people's misfortune.

One corporate executive described the situation in these words: “We’ve solved the issue of HIV. We’ve come up with new drugs for cancer. A lot of the latter years in life have been contributed to by this industry. So why do people hate us? A Martian arriving on Earth would not understand why a sector that has helped bring about huge progress in health in recent decades is still mistrusted in some quarters” (Campbell, 2014). That sheer fact that companies develop and produce medicines, something that save or improve millions of lives, and that they put a price tag on it, which means that there will be people who could not afford them, leads to a tendency to see pharmaceutical companies as immoral or unethical. This perception of immorality distorts the view and leads to “… a growing public belief that pharmaceutical companies have a special humanitarian duty to help the sick, wherever they are in the world and however little they can afford to pay” (Boseley & Pratley, 2003). This being a very sensitive issue, with potentially huge reputational damage if not handled properly, prompted the corporate representatives to generally either avoid it in public discourse, or if mentioned, to defend the fact that they are commercial organisations in a very tactful and careful way: “We cannot as an industry solve the healthcare problems of the entire poor world, nor should we be held accountable to do that. What we should be held accountable to is to the extent we can to make our products available on affordable terms to many of the poor countries” (Boseley & Pratley, 2003). *GlaxoSmithKline* CEO Garnier said: “The pharmaceutical industry must continue to invest in innovation to seek better solutions for tackling these killers. However, there is a dilemma. While we feel a moral duty and a fundamental desire to conduct research and development into vaccines and medicines for the diseases that blight the developing world, the harsh truth is that there is limited profit to be made from them. Yet, to survive, pharmaceutical companies must be profitable to deliver shareholder value”. (Garnier, 2005)

The newspapers recognize this disbalance, and they once again often intervene from the position of the authority to establish the balance of confronted opinions and perspectives. Media, not burdened with the ethical ambiguity assigned to pharmaceutical companies, intervene because they see that the pharmaceutical companies are reluctant to defend their position. They emphasize the social importance of pharmaceutical companies, pointing out that they got to that position precisely because they are businesses: “Yet great companies are precious economic and social organisations. At their best, they are agencies for human betterment. If Britain is going to improve its economic and social performance, it needs more such companies, especially in the knowhow-driven economy of today […] Successful companies are defined by their capacity to deliver and pursue clearly defined visionary corporate purposes – to be the best, to do business that is sustainable, to serve humanity, to stretch every muscle to innovate” (Hutton, 2016).

The pursuit for profits made the companies into efficient organizations that are capable of solving major problems of humanity. If the incentives for them to do so are gone, the capability will be gone too: “Let the private sector do what it does best: If we want corporations to be able to deliver these social goods in a sustainable manner, they need to profitable. Profitability is sustainability, aid is temporary” (Anyangwe, 2015). The only way to preserve the future development of new medicines is to allow businesses to be businesses: “How can business help? Well, by far the greatest contribution business can make to development is through the very act of running its business […] In all cases, private sector involvement in development will only be sustainable and make an impact if it is based on a hard business case and good business practices. We are best placed to make real contributions when we are making profits which allow us to invest further in the local economies and communities, as well as expanding the business” (Mackay, 2005).

7.5.2 Storyline 2 – Business logic barrier

The second dominant storyline is related to the first one, and it is, in a way, its reflexion in the mirror. If the patients' dominant discourse is imbedded in moral superiority of their position, then the dominant discourse of the pharmaceutical companies is imbedded in their financial power and in their institutionalised position in a free-market and capitalist socioeconomic system. Companies provide valuable goods and services (they discover, produce and distribute medicines) but only so because this enables profit. The media once again acknowledge the validity of this position but try to balance things out. Related to this dominant storyline, three extensively used and reoccurring mechanisms are observed: 1) 'Anonymous sharp tongue' ('Telling the hard truth'); 2) 'Emotional plea'; 3) 'Rounding up the usual suspects'.

7.5.2.1 'Anonymous sharp tongue' ('Telling the hard truth')

One interesting reoccurring storyline building mechanism identified is the 'anonymous sharp tongue' or 'telling the hard truth', where basically the newspapers used anonymous sources to criticize the position, idea, policy or strategy of a company. By using someone anonymous (on occasions perhaps even someone fictional, a made up character that embodies the critical position of the media but at the same time, because of its anonymity, blunts the edge of potential confrontation), but always someone who is described as versed and who has insights into what is happening, and by pointing out and agreeing with this opinion, the newspapers can continue to hold a seemingly objective and balanced position, but in fact completely align with the criticism of the company (or another powerful actor, such as the government) (Weicher, 2006).

For example, analysing the bad overall reputation of the pharmaceutical companies among general public, it was reported that "… institutional investors, as well as industry leaders, are concerned about reputation management and the license to operate that comes from effectively building and communicating trust" (Anonymous, 2007). Criticizing the lack of shareholder engagement with the running of the companies, *The Financial Times* projected their own dissatisfaction to anonymous directors: "… but also directors at the Rio meeting were perplexed by the lack of interest that shareholders display in engaging with their companies outside of the heat of the proxy/annual meeting season" (Goodman, 2012). This mechanism is also used to back the positions of pharmaceutical companies, when they are seen as a weaker (challenged) side, for example when confronted with the prevailing opinion within a sector or business in general: "The head of a British multinational declared this week that he opposed the idea of companies that exist 'somewhere in the ether'. It may be "odd to be British, but it's even odder to say you're nobody", this chief executive said. "Who in the world would applaud you for saying that you are rootless?" (Hill, 2014). It is also used when opinions of the companies clash with the government policy: "Today, some of the world's biggest businesses are calling for better – and more aggressive – government policy to tackle the biggest global challenges" (Gittsham, 2015).

7.5.2.2 'Emotional plea'

Another storyline building mechanism frequently used in the examined newspaper articles, especially when newspapers are trying to oppose or counterbalance the narratives of the pharmaceutical companies, is introduction of personal and emotional experiences and pleas, focusing on individual suffering, destitute and general lack of options or perspectives. Moreover, this sort of rhetorical device is very common in journalism, with the goal to invoke pity and compassion among readers and subsequently stir the public opinion and influence other more powerful actors to do something about the issue or a problem. This mechanism is particularly convenient to use in the context of pharmaceutical industry, as the industry generally suffers from the problems related to the perception of its inherent 'wickedness' – the fact that their business model relies on putting a price tag on a product that has the power to save human lives: “The fundamental problem for drug companies is that they make money by charging a price to tackle human misery […] It is not hard to see how this situation can be elevated to a scandal – a continent is dying while waiting for patents to expire” (Ahuja, 2001). Building a case to support the position of the pharmaceutical industry, from whatever perspective, is always difficult, as it inevitably has to deal with this moral corruption imbedded in the industry’s very nature.

In such an unstable equilibrium, it is fairly easy for the journalists to discredit pharmaceutical companies and their positions and claims if they wish so, as the emotional and personal stories are automatically seen as morally superior to any claim or position that is based in economic, political or scientific reasoning. Starting from the headlines, it is enough for the newspapers to title the article “What is the value of a human life?” (Ward, 2016) and the readers would automatically be able to recognize preferred and supported position, even if in the article itself the journalists portray and explain all positions fairly and (seemingly) without bias. This mechanism is particularly used when pharmaceutical companies were criticized about the problems of medicines’ prices and availability in the less developed countries.

Two main approaches to this mechanism can be observed. First is the attempt to shock the readers and delegitimize pharmaceutical companies with numbers of people who are negatively affected and by using shocking terms such as ‘wipe out’, ‘exterminate’, ‘genocide’, etc: “Millions are dying in developing countries of preventable diseases such as AIDS and curable diseases like malaria and tuberculosis. The HIV/AIDS epidemic is doing enormous economic, social and political harm, wiping out a generation of young adults who were workers, parents and teachers” (Boseley, 2002) or “Drug-makers know we will pay any price to relieve our pain, but will we pay as much to relieve someone else’s suffering? Making new medicines is costly and drug companies prefer people with cash in their pockets. The world spent $400 bn on prescription medication last year and the well-to-do took most of the pills and potions [...] Meanwhile, malaria kills three million a year, mainly African children under the age of five" (Mortished, 2003). The second approach is more personal, it focuses on specific individuals, with their names, age and life circumstances exposed in detail: "*Médecins Sans Frontieres* has identified candidates for antiretroviral treatment, people such as Kevin Wanjala, 11, who was born with HIV and has been chronically sick. Shy and small for his age, he was at the top of his class in his favourite subject, English, before dropping out due to illness. "When I grow up I'd like to be a car mechanic," he says. Kevin is nearing full-blown AIDS, said Florence Olanya, an *MSF* nurse. Without drugs he is unlikely to last two years" (Carroll, 2003); "Holding the white pills tightly to his chest like a kid with his first pocket money, Thongsbotho Goepomang has the smile of a young man who knows that he is lucky" (Dyer, 2003).

7.5.2.3 'Rounding up the usual suspects'

In this mechanism, in order to oppose the viewpoints and arguments of pharmaceutical companies, newspapers create and maintain a pool of 'adversaries', either individuals or organizations that are frequently referenced and asked for opinion just to oppose and contradict the companies. The main characteristics of these 'usual suspects' are that: 1) Their expertise and reputation are immaculate – the newspapers do not have to explain who they are and what are they standing for; 2) The general public immediately knows that the 'usual suspects' will be maximally critical of the companies and their actions, that there is almost an inherent opposition or animosity between them and the pharmaceutical companies. In a way, the newspapers almost expect a Pavlov's reflex reaction from the readers just on the very mention of the organisation. Like a token used to automatically delegitimize what company does or says.

There are few organizations that play the role of the 'usual suspect' very well, most of them influential NGOs, but *Médecins sans frontières* (*MSF*) is the most notorious, at least in the newspaper articles that were examined in this study. For example, when *The Guardian* was criticizing the fact that international vaccination programme was too expensive, they readily used the *MSF* standpoint that "… it looks to us like a big subsidy for pharma" (Boseley, 2013). When pressuring the companies to contribute more to the development of the healthcare systems in the underdeveloped parts of the world, it was written that "… we don't [call for] the pharma industry to develop health systems approaches to increasing access, says Malpani (*MSF*), that's the responsibility of governments, donors, the *World Health Organization*. The industry should focus on what it is intended to do, which is [...] making the right products at the right price" (Smedley, 2015). One of the main defence lines of the pharmaceutical companies when they are trying to justify the high prices of new medicines, even in countries that cannot afford those prices, is the argument that research and development of new medicines is very expensive and that it is completely covered by the companies. However, *MSF* had different opinion: "Critics of the pharmaceutical industry attack such figures as a vehicle for corporate campaigns to achieve high prices for new drugs. For example, Rohit Malpani, policy director of the medical relief group *Médecins sans frontières*, pounces on the *Tufts*' $2.56bn estimate. "We know from past studies and the experience of non-profit drug developers that a new drug can be developed for just a fraction of the cost the *Tufts* report suggests" (Cookson, 2015).

7.5.3 Storyline 3 - Leadership in mediating confrontation

As it can be seen from first two established storylines, very often the pharmaceutical sector and other stakeholders (mostly patients and their advocate groups, NGO's) are too far apart in their positioning and clashing of these two dominant (in a way radical) discourses is counterproductive in the process of sustainable transformation of the sector. There is a clear imbalance in the perception of the morality (ethical ambiguity) of two confronting dominant discourses. Thus, the duty of the impartial actors (media, governments) is to take charge and do what they can to facilitate rapprochement and even create a discourse acceptable to both parties. This joint discourse would then be a foundation for establishment and fortification of common knowledge and a cornerstone for the creation of the discourse coalition and future sustainable transformation. Seeing themselves as impartial and rational actors with capacities to intervene, the representatives of media are assuming authority and elevate themselves to be the righteous and impartial judge on the issue. This dominant storyline is about media asserting their power over other stakeholders and ensure that they are the only ones (or at least the most salient actor) when it comes to interpretation of sustainability related topics, issues, problems and actions. Apart from occasional assurance given to readers about media impartiality, expertise and comprehensiveness, occasionally the media would employ literary devices that emphasize both their leadership role and also community in action. Related to this dominant storyline, we observe two mechanisms: 1) 'Media the Bellwether' ('we should', 'we have to', 'we must'); 2) 'Foreseeing the future'.

7.5.3.1 'Media the Bellwether'

One way the media try to assert dominance and leadership in analysing and politicizing sustainability, and thus establishing storylines and dominant discourses, is by using pronouns and verbs that suggest joint or communal experience, opinion or action. This is something that is very common and used quite frequently. For example, criticising the decision of some pharmaceutical companies to shut down their research and production facilities in the UK, *The Times* stated that "… we have got the ability for long-term sustainability in the industry, but to achieve that we have got to return short term competitiveness in a world market" (Kemp, 2013). Similarly, commenting on the notion that foundations of British economy should be value creating companies, such as pharmaceutical, the same outlet stated that "… we're not interested in casino capitalism; we want sustainable prosperity" (Jameson, 2003). "We're talking about fundamental risk management. We want companies to have high-quality, sustainable earnings" (Maitland, Tucker & Turner, 2004).

7.5.3.2 'Foreseeing the future'

Probably the most radical example of exercising the authority-order journalistic norm by the newspapers in the case of examined pharmaceutical companies is the storyline building mechanism labelled 'Foreseeing the future', in which the newspapers dismiss the ongoing debate between the different stakeholders and their viewpoints and simply conclude the discussion by portraying the development which they see as something that is certain to happen in the future, usually followed by firm and uncompromised advice. For example, when analysing the possibility for state interventionism in case that mergers and corporate takeovers endanger the existence and strategic positioning of one of the companies examined, *The Times* stated: "The political and cultural mood is swinging back towards statism and away from the assumption – held for several decades now – that the autonomous efforts of individuals, companies and other enterprises give better results than centralised, politicised control. […] investors must adjust or get used to the idea that they will be cut off from opportunities to invest in the relatively free and diverse ways they did previously. I hope that policymakers around the world will appreciate that free and open economies are best equipped to deliver social benefits, in health as in many other spheres" (Cole, 2009).

The phrases used to indicate certainty are 'will be' and 'is/are going to'. The advice is mostly given in the form of imperative, by using the words 'must', 'should', 'ought' or 'need'. For example, writing about the necessity of communication and collaboration between the stakeholders in the healthcare field, *The Guardian* pointed out that: "… new and effective relationships need to be forged between patients, commissioners, providers, charities, commercial organisations – such as technology, private healthcare and pharmaceutical companies – and established care providers. Without them, the sustainability of the UK's *National Health Service* and other health systems internationally will be at risk". (Campbell, 2014) The same goes when the core of what it means to be sustainable is discussed and analysed: "There is no simple answer, but companies need to accept that the rules have changed; that profit alone is no longer enough. It requires a much fuller awareness of the business. That means, first knowing, understanding and talking to critics. […] If *GlaxoSmithKline* wishes to cast itself as a leader in public health, it must participate in a much wider debate about the role of the pharmaceuticals industry in society – and it must persuade its shareholders to make greater sacrifices, which they will not leap to agree to" (Cowe, 2001).

7.6 Discussion

This study explores the concepts of storylines and different storyline-building mechanisms in greater depth. Starting from the assumption that it is difficult for some companies to convey their (sustainability) message to other stakeholders and also for other stakeholders to articulate their response (Du, Bhattacharya & Sen, 2010; Herzig & Schaltegger, 2011; Golob & Podnar, 2014; Barkemeyer et al., 2020; Pizzi et al., 2021), the role of mainstream print media both as an arena for stakeholder communication and as social evaluators (of both companies and their stakeholders) was exposed in its full prominence (Norris, 2000; Lang & Lang, 2009; Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017; Barkemeyer, Givry & Figge, 2018; Roulet & Clemente, 2018). The idea that mainstream print media shape the general public understanding of sustainability issues by utilising their power of agenda-setting, framing and storyline building (Morsing, 2017; Sheng & Lan, 2019; Else, Choudhary & Genovese, 2022) is not only interesting from the theoretical perspective (for media and communication studies), but also has significant implications on both media and corporate practice and policies (Deephouse, 2000; Graf-Vlachy et al., 2020). Better understanding of how media act as social evaluators of business and how they understand, reason and disseminate corporate activities to other stakeholders, can help businesses to better articulate their communication strategies, leading to the improvement of their relationship with the stakeholders and thus lead to both intangible and tangible gains (Rindova, Pollock & Hayward, 2006; Christensen & Cheney, 2011; Esmann Andersen & Høvring, 2020).

By engaging in content and discourse analysis of the selected newspaper articles related to sustainability and *AstraZeneca* and *GlaxoSmithKline*, this study identifies three dominant storylines: first, where stakeholders' moral superiority was seen as a barrier for sustainability and the newspapers engaged in defending the companies; second, where dominance of the business logic within companies was as a barrier for sustainability and media engaged in defending (or promote the interests) of the stakeholders; and third, almost as a merger of the previous two, where media was explicitly assuming leadership in mediating confronted discourses. Each of the identified storylines was shaped using different storyline-building mechanisms, with the purposeful or unintended desire to create 'common knowledge' and transmit it to their readers, thus contributing to the overall consensus between the stakeholders on what sustainability in the sector is and how it is manifested (Hajer & Versteeg, 2005; Boykoff, 2007; Boykoff & Boykoff, 2007; Hajer, 2009; Cardon, Stevens & Potter, 2011; Osmundsen & Olsen, 2017).

Like in every other storyline-building process done by the print media, a wide variety of different journalistic norms, communicative, rhetorical and logical devices (and even fallacies) were used, intentionally or unintentionally (Boykoff, 2007; Hajer, 2009; Osmundsen & Olsen, 2017). If we examined and described all of them, that would diffuse the focus of the research and would not contribute much to the already overwhelming literature on journalistic norms, rhetorical devices and logical fallacies (see: Boykoff &

Boykoff, 2007). This study opted to track, identify, and describe those that seemed most relevant (and most widely used) for the specific context of the research – the ambiguous perception of the nature of the pharmaceutical industry and its inability to communicate to most of the other stakeholders directly (Wanderley et al., 2008). Some standard rhetorical devices common for print media were, of course, used very generously and its analysis was quite interesting, especially those in newspapers that aimed educated and versed audience, such as *The Times* or *The Guardian*. With great pleasure and satisfaction, one could read how "… you don't need a lawyer or a marketing person [as a CEO], you need Attila the Hun – a total butcher" (Burgess & Jack, 2012) or how a Head of Research Department of a major pharmaceutical company describes meetings with R&D departments of other companies as "collective crying sessions" (Jack, 2013b). But these rhetorical and literary devices are not specifically unique or relevant for the examined context.

Storyline-building mechanisms identified and described in more detail somewhat converge with journalistic norms described by Boykoff and Boykoff (2007), first-order journalistic norms (personalization, dramatization and novelty) and second-order journalistic norms (authority-order and balance). Usage of these norms has the goal to legitimize the bias that media create in their interpretation of the events and stakeholders' positions and thus legitimize process itself and the final output – storylines and dominant discourses (Hajer, 1993; Hajer & Versteeg, 2005; Alvarado et al., 2021; Else, Choudhary & Genovese, 2022). Unlike Boykoff and Boykoff (2007), who argued that journalistic norms are universal (could be used to create whatever framing the media is aiming for), this study noted that specific mechanisms used by mainstream print media have limited usability – they are dependent on whether the newspapers defend the pharmaceutical company, their actions or positions (challenged by other stakeholders), or they criticise the pharmaceutical company, their actions and positions. For example, a storyline-building mechanism that relies on an emotional plea to the readers would not be very efficient if used to back the position of the powerful and rich pharmaceutical company, thus confirming that communicational devices used to establish storylines have to appropriate to the context and the audience (Koller, 2004; Skorczynska & Deignan, 2006).

Some of the stakeholders (environmental NGOs, patients' rights activists, etc.) had focused their attention on negative outcomes of companies' activities and policies, which is normal and understandable because they are the ones who are either directly affected or who represent the interests of those who are affected, but this threatens to upset the balance of viewpoints and opinions and thus shape general public opinion in a way that is somewhat distorted and subsequently difficult to facilitate sustainable transformation, because for that to happen all the stakeholders have to cooperate (Dyllick & Hockerts, 2002; Lubin & Esty, 2010). In such case, the media tend to assume the role of the authority and restore the balance of viewpoints and opinions (Gamson, 1992; Entman, 1993; Clemente & Gabbioneta, 2017). In particular context of the first dominant storyline, the newspapers assume position that some stakeholders either cannot understand the complexity of the pharmaceutical companies' position (or they do not want to because they do not have the imperative to be or act balanced), and they assume the radical position that a company cannot be seen or perceived as sustainable if they still have certain issues or problems in that domain. In this case, the media take upon themselves the role of those whose responsibility is to educate, widen the debate and point out that journey toward sustainability is a combination of strategic optimism and tactical pessimism (Sutton, 2004) – assuming that great goals can be achieved, but also assuming that many things can and often will go wrong.

Storyline-building mechanisms used to defend the positions of pharmaceutical companies are in their quality and their proximity to accepted journalistic norms closer to ones that restore balance and establish authority-order (Boykoff & Boykoff, 2007). On the other hand, the ones that are used to criticise the position of the pharmaceutical companies and emphasize and legitimize the viewpoints of other stakeholders are more related to personal and dramatic norms (Boykoff & Boykoff, 2007). The situation in which the powerful actor (pharma) asserts its viewpoints to others and establishes not just structural domination but also discursive, the media take on themselves the role of resonating the positions and viewpoints of other stakeholders (Graf-Vlachy et al., 2020; Griffith Oliver et al., 2023). Apart from rationally explaining their stakeholders' interests, they are also amplifying the moral or ethical dimension of their grievances and most efficient way to do it is to focus on personal experiences (personalization and dramatization), trying to cause the emotional response that would facilitate support, and also combining personalization and dramatization with restoring the balance of opinions and the authority and order, by opposing the viewpoints of the pharmaceutical companies with the viewpoints of actors who also have high power, but whose power come from their ethical high ground (Kiousis, 2004; Osmundsen & Olsen, 2017; Sheng & Lan, 2019; Esmann Andersen & Høvring, 2020).

Finally, assertive types of storyline-building mechanisms are invoked on occasions when the confronted viewpoints of different stakeholders are particularly strong and when it's difficult for newspapers to resolve the conflict and assert the preferred opinion by agreeing or supporting one of the sides (Hajer, 1993; Alvarado et al., 2021). Thinking about Boykoff and Boykoff (2007) classification of journalistic norms, the balance of opinions and viewpoints is used to legitimize the conclusion, the frame and the storyline. If all the relevant and meaningful sides are being included in the discussion, the prevailing opinion is going to be legitimate (Hajer & Versteeg, 2005; Barkemeyer et al., 2020). However, on occasions, the balance of opinions considered can lead to a sort of stalemate, where any sort of conclusion could potentially be delegitimized by the sheer power of the counterarguments used in the discussion. Thus, in accordance with the agenda-setting and framing role the newspapers took upon themselves, they need to end the chaos and cacophony of arguments and opinions and offer an authoritative position the general public can accept as a ‘common knowledge’, according to their role of social evaluators (Deephouse, 2000; Lang & Lang, 2009; Clemente & Gabbioneta, 2017; Roulet & Clemente, 2018). Thus, for mechanisms that offer such power, the vocabulary and the imperative tone are materialising the authority of the newspapers, the ‘unhealthy’ balance that causes the deadlock is overridden and the order is restored.

8. Chapter 8 – Discussion

The research embarked on a difficult task to examine sustainability in the pharmaceutical sector and explore several important problems regarding the issue. Despite being designed in such a way that distinctive and separate studies focused on specific issues, the thesis itself covered the main topic of stakeholder relationships and evaluations in the pharmaceutical sector related to their sustainability. The research started from the assumptions that sustainability is an important issue for all – communities, governance organizations and businesses alike – and that business organizations genuinely want to proceed with transformative engagement in sustainable transition of their strategies and practices (Chapter 2). Based upon that, the research contextualized sectoral specificities of certain business organizations whose stakeholder management, thus stakeholder communication, cooperation and evaluation, is problematic, which, in turn, added to the difficulties of their proper social evaluation and overall perceived ambiguity of their corporate sustainability performance (Chapter 3). After examining what would be the most accurate and efficient methodological tools to address the problem (Chapter 4), and acknowledging the fact that strong stakeholder relationships enhance the possibility of meaningful feedback and organizational learning, and, subsequently, the improvement of corporate sustainability for the common benefit, the research was set to examine how pharmaceutical companies and their stakeholders communicate and cooperate in regard of sustainability issues via both interpersonal (interorganizational) (Chapter 5) and mediated channels and avenues (Chapters 6 and 7).

Breaking it down to its component parts, the examination of the case study of a joint multi-stakeholder sustainability project (Chapter 5) that was supposed to bring the stakeholders closer and engage the social influencers to mobilise the wider community to change its behaviour to more sustainable ways, and exploring the ways the mass printed media evaluated and framed the corporate sustainability of the pharmaceutical companies

(Chapters 6 and 7), this research provided for several important findings. First, the findings relate to the very understanding of the sustainability issues and problems associated with the pharmaceutical sector, their diversity and complexity, and the ways the companies are tackling the problem. Second, the research analysed problems and challenges related to stakeholder communication and engagement in the process of sustainable transformation. Third, the research meticulously scrutinised a possibility for pharmaceutical companies to engage some of their stakeholders as social influencers in the process of implementation of sustainable projects and all the possible advantages and obstacles that emerge in such an arrangement (organisational, contextual, cognitive, etc.). Fourth, accepting the obstructive influence of structural arrangements characterising the pharmaceutical sector, the research was interested in the role of social evaluation agents who have the power to shape the public understanding of the sector, especially its sustainability credo, focusing on mass printed media and their power to set the public agenda, frame the discourse around sustainability-related topics and issues, and establish storylines or dominant keys for reading and understanding the subject. Fifth, the research identified the most salient themes related to sustainability in the pharmaceutical sector, which, by the very actions of the press, transponded into pressing public concern. Finally, the research analysed the very evaluations of sustainability positions, actions and strategies of pharmaceutical companies and their stakeholders, manifesting as dominant sustainability storylines.

The research shows that the examined pharmaceutical companies were very interested and strongly engaged in the process of sustainable transformation, and that they were trying to move away from the mere process of compliance (Vogel, 2005; Pomering & Dolnicar, 2009), where sustainability goals and objectives are completely determined and imposed by other societal actors (the national governments, international organizations, industry or business sector related governance organizations, etc.), to a more proactive approach, characterized by examining what could be done to achieve sustainability by engaging the existing corporate resources, forging new partnerships and thinking about possible aligning of the long-term business strategies to the overall long-term societal concerns (Clark, 2001; Wilkinson, Hill & Gollan, 2001; van Marrewijk, 2003; Vogel, 2005; Waddock, 2008; Sharp & Zaidman, 2010; Wiek et al., 2012; Sabini, Muzio & Alderman, 2019; Barendsen, Muß & Silvius, 2021). This drive can be seen in corporate communications (via their sustainability/ESG reports or corporate websites and social media accounts) (Adams & Kuasirikun, 2000; Sweeney & Coughlan, 2008; Schneider, Wilson & Rosenbeck, 2010; van Duuren et al., 2016; Iqbal & Keay, 2019; Barkemeyer et al., 2020; Berniak-Woźny & Kwasek, 2020; Bose, 2020; Pizzi et al., 2021), but also in their communication and engagement with individuals and organizations that are considered to be corporate stakeholders, thus important social evaluators of corporate behaviour (such as, for example, the media outlets) (Deephouse, 2000; Lang & Lang, 2009; Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017; Barkemeyer, Givry & Figge, 2018; Roulet & Clemente, 2018; Barkemeyer et al., 2020).

The research determines that the analysed companies were trying to publicise their sustainability perspective and what they think about their role and duties in the process of achieving more sustainable future (Miettinen & Khan, 2022; Malmqvist et al, 2023), but that they also encountered difficulties in the process, originating in the embedded detachment of the sector from its stakeholders and the lack of effective communicational avenues. The companies realised that most important and pressing issues for the overwhelming majority of the public were related to the social side of pharmaceuticals corporate sustainability (Adams & Kuasirikun, 2000; Fernandez-Feijoo, Romero & Ruiz, 2014; GSK, 2014; Iqbal & Keay, 2019), but the sector affiliation also drove the companies to engage in environmental programmes and projects (net zero carbon emissions, recycling, reducing chemical pollution, etc.), even employing the corporate resources to find long-term radical and transformative solutions for certain problems (for example, developing a plastic-dissolving enzymes) (Veleva et al., 2003; Hahn et al., 2010; Belkhir & Elmeligi, 2019; Consolandi et al., 2020). However, the research shows that the barriers to the sustainable transformation in the sector were still numerous and quite serious, and they ranged from the consequences of the structural positioning of the industry (socially, economically and politically important, thus less concern shown about the environmental impact) (Gambardella, Orsenigo & Pammolli, 2001; Gallet & Doucouliagos, 2017; Pisani & Meadows, 2019; Ostwald et al., 2020), to the nature of their operations (being, in essence, chemical, thus high-polluting industry) (Shalini et al., 2010; Boxall et al., 2012; Belkhir & Elmeligi, 2019; de Oliveira Souza et al., 2021; Wilkinson et al., 2022), and to the overall systemic detachment of the industry from their most important stakeholders – medical and pharmaceutical professionals and their customers (patients) (Abraham & Lewis, 2000; Scherer, 2000; Abraham & Lawton Smith, 2003; Williams, Gabe & Davis, 2009; Rowe, 2013; Tang et al., 2023).

The research also established that the process of stakeholder engagement and communication, which is necessary for successful sustainable transformation of any business, was very difficult for the pharmaceutical companies (Ayers, 1987; Perrini & Tencati, 2006; Pomering & Dolnicar, 2009; Moser, 2010; Adomßent & Godemann, 2011; Bryson, Patton & Bowman, 2011; Yuan, Bao & Verbeke, 2011; Crane & Glozer, 2016; Skilton & Purdy, 2017; Silva, Nuzum & Schaltegger, 2019). Theoretically, this is something that is usually explained by the sector-related structural obstacles. When it comes to sustainability issues and problems, it was fairly easy for the companies to engage with institutional actors, for example in the field of R&D endeavours related to more sustainable practices and technologies, the research established that the companies had managed to establish meaningful and fulfilling long-term collaboration with institutions of science, education and research, such as different universities, and even with other similar biotech companies who could be considered as competitors (Staropoli, 1998; Calero, van Leeuwen & Tijssen, 2007). In the field of sustainability strategies, policies and the very process of policy-making, the companies had fruitful communication with governmental bodies, international governance organizations and policy-makers, which was the result of both the fact that the companies already were important players in the national (and even international) business and scientific ecosystems, but also the fact that corporate executives were able to establish private liaisons with politicians and government officials (Permanand & Altenstetter, 2004; Wogart, 2007). The research shows that this ability was favourable for the efforts of both companies to position themselves as both drivers of sustainable transformation and as honest brokers in the process of multi-stakeholder conceptualisation and deliberation of sustainability projects, programmes, policies, and strategies. This finding supports the notion that actions of external stakeholders with high agency such as lawmakers represent powerful means to push sustainability forward, and that companies react to these external forces by developing and implementing sustainability strategies (Banerjee et al., 2003; Gast, Gundolf & Cesinger, 2017), and that eventually the corporate reactivity can evolve to proactivity, if scrutinised by the public pressure and continued to be pushed and supported by stakeholders (Berger-Walliser & Shrivastava, 2014; Potrich, Cortimiglia & de Medeiros, 2019).

However, the research also shows that the ability of the pharmaceutical companies to interact with high-agency and institutional stakeholders did not reproduce itself fully with stakeholders such as medical professionals, pharmacists and patients (medicine users), who were also companies' primary stakeholders and without whom it would be impossible for companies to exist and operate (Tang et al., 2023). Despite the companies professing such an intention: "Our commitment to good governance and transparent reporting reflects our core values. To help us prioritise the issues we focus on, we engage with a wide range of stakeholders to understand what matters most to them" (GSK, 2014), the findings of this research point out to systemic obstacles hindering the process. This inability to properly communicate can be explained with strict detachment between the companies and patients, detachment that was imposed to protect the latter from possible corporate pressures, which positions the possible contact between them in a very formal, rigid and structured setting (Abraham & Lewis, 2000; Scherer, 2000; Abraham & Lawton Smith, 2003; Williams, Gabe & Davis, 2009). The idea of this formal detachment was not to incapacitate communication and collaboration regarding sustainability, but the research shows its side effect was augmentation of any non-commercial contact as well. The companies were very much aware of this and they pledged to build bridges with their stakeholders using different possible avenues, focusing on their communities, medical professionals, pharmacists and pharmacologists, and, ultimately, the patients or users of their products (Adams & Kuasirikun, 2000; Sweeney & Coughlan, 2008; Sones, Grantham & Vieira, 2009; Schneider, Wilson & Rosenbeck, 2010; Fernandez-Feijoo, Romero & Ruiz, 2014; Iqbal & Keay, 2019; Berniak-Woźny & Kwasek, 2020; Linder et al., 2023; Kalia & Aggarwal, 2023). However, despite the awareness, this research managed to establish that in practice it was very difficult for pharmaceutical companies to break up the existing communicational patterns and truly reach out to stakeholders, with the honest intention for this contact to be reciprocal.

The research pointed out that one of the possible avenues for such possible rapprochement was the idea of conceiving and conducting different multi-stakeholder sustainability projects (van Marrewijk, 2003; Wiek et al., 2012; Sabini, Muzio & Alderman, 2019; Barendsen, Muß & Silvius, 2021), and this avenue was systematically examined in the Chapter 5 of the thesis. Of course, the companies were involved in many such projects in the time period, in different sustainability areas, and involving many different stakeholders. The research discovered that the overall prevailing logic behind such engagements was that the stakeholders could provide for both insight and expertise about what could and should be done related to different sustainability problems and issues, while the company would also pitch in its resources, expertise and influence. Ideally, apart from the eventual successful resolution of such projects, the connections and communication ties made during the project would endure for a longer period of time, facilitating easier and more fruitful future engagements and, subsequently, more successful future sustainability outcomes (Strebel & Posch, 2004; Cargo & Mercer, 2008; Loch & Kavadias, 2011; Fransen, 2012; Eskerod & Huemann, 2013; Silvius & Schipper, 2014; de Bakker, Rasche & Ponte, 2019; Sabini, Muzio & Alderman, 2019). One of such projects was taken as a case study for this research, with the idea to examine it from the theoretical perspectives of social evaluation and influence (Ayers, 1987; Perrini & Tencati, 2006; Daley, 2007; Pirard, 2012; Von Geibler, 2013; Heikkurinen et al., 2019; Hansen & Schrader, 1997; Orlitzky, Schmidt & Rynes, 2003; Pomering & Dolnicar, 2009; Young et al., 2010; Bryson, Patton & Bowman, 2011; Goldsmith & Goldsmith, 2011; Bond et al., 2012; Abrahamse & Steg, 2013; Ruben & Gigliotti, 2016; Skilton & Purdy, 2017; Young et al., 2017; Amel-Zadeh & Serafeim, 2018; Lu et al., 2023). The research shows that the project titled ‘Complete the Cycle’ was devised in such a way that most of the work was delegated to corporate stakeholders (pharmacists and pharmacy technicians), who were supposed to act as social influencers in their communities and engage in the social influence strategies of being ‘block leaders’ and ‘role models’, while the company itself provided for resources, logistical support, finances and marketing, and by doing that assumed the social influence role of ‘public commitment maker’ (Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013; Young et al., 2017). The project was initially successful but eventually died out somewhat quietly, which indicated that something was wrong either with its foundational assumptions or with its implementation.

This research established that for social influence approach in the multi-stakeholder sustainability projects to be successful, several issues have to be seriously taken into account. First, the chosen social influencers have to be the right people or organizations for the intended job (or social influence approach utilised) (Goldsmith & Goldsmith, 2011; Bond et al., 2012; Abrahamse & Steg, 2013; Ruben & Gigliotti, 2016). The analysis of the empirical case in this research showed that, in principle, 'Complete the Cycle' project had mixed results in this domain. It was established that the choice of pharmacists and pharmacy technicians to act as 'block leaders' and 'role models' was sound, as it was shown that, in principle again, those people do enjoy high level of trust and respect within their communities and that they would be in the position to encourage their customers to return their used inhalers for recycling (Bond et al., 2012; Young et al., 2017; Duxbury, Fisher & Jeffreson, 2023). Most of the inhaler users manage a chronic pulmonary condition thus they return to their pharmacies frequently and regularly and this is a good setting for the establishment of long-term relationships where non-healthcare issues could also emerge in the conversation (Austin, Gregory & Martin, 2006; Worley et al., 2007; AlGhurair, Simpson & Guirguis, 2012).

On the other hand, the study established that the company itself assumed the role of 'public commitment maker', which is also something that makes a lot of sense, as they positioned themselves as the brand behind the project and a financial and logistic enabler (Cialdini, 2001; Strebel & Posch, 2004; Cargo & Mercer, 2008; Abrahamse & Steg, 2013; Silvius & Schipper, 2014; Sabini, Muzio & Alderman, 2019). However, the research showed that the embedded ambiguity of the company and especially of their sustainability record and strategies meant that their public commitment and support for the project remained under the radar and generally unnoticed, as the project failed to properly advertise the company's public commitment and support. The assumption that 'block leaders' and 'role models' would also successfully advertise the role of 'public commitment makers' was proven to be a misjudgement, the one that failed to take into account the severe limitations (contextual, personal, etc.) of the 'block leaders' and the 'role models' (Weimann, 1994; Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013; Young et al., 2017). Finally, when it comes to appropriate choices made in the domain of potential social influencers, the research concluded that the project omitted to engage with one potentially very potent partner – local environmentalists (whether they were or not inhaler users) (Goldsmith & Goldsmith, 2011; Tindall & Piggot, 2015; Owen, Videras & Wu, 2010; Visser & Crane, 2010; Viglia et al., 2023). The research concluded that the project itself envisioned very linear model of communication (the company – pharmacists – inhaler users), which meant that breakdown of this linear model, for any imaginable reason, would mean almost automatic project failure. As there were many possible obstacles in the proposed linear communication model, the entire scheme was found to be very vulnerable. The analysis of the empirical case in this research showed that, on the ground, the customers and environmental enthusiasts were very often far more interested and invested in the project and its success than the pharmacists. The omission of those people from the pool of potential social influencers made the entire project quite fragile and overly dependent on individual characteristics of pharmacists and the contextual factors that influenced their performance.

The research defined another project deficiency, and that was the assumption that the selected social influencers (pharmacists and pharmacist technicians) would be able to act in their capacity almost as ideal types (Kaiser et al., 1999; Visser & Crane, 2010; Abrahamse & Steg, 2013). This assumption was not consciously made of course, but there is a noticeable neglect to consider all the mediating factors that could impede the pharmacists to assume their assigned roles of 'block leaders' and 'role models'. As the research shows, those factors were both individual and personal (for example, pharmacists who were not that much interested in environmental protection and sustainability, thus not very much motivated to be an active part of the project), or contextual (for example, pharmacists being busy with their regular work in order to fully commit time and energy to a sideline activity). As the project counted on inherent motivation of the 'block leaders' and 'role models', no external incentive was provided for participation. This confirms that only people with very strong environmental values would be motivated enough to commit themselves to the project (Kaiser et al., 1999; Shields, Šolar & Martin, 2002; Visser & Crane, 2010; Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013; Raymond et al., 2019; Linnér & Wibeck, 2020). In the examined empirical setting, the project engaged with both the small community pharmacies and large pharmacy chains, and with large pharmacy chains the decision to enter the project partnership was made by corporate executives and not by pharmacists, thus many of them felt the project was just another unwanted burden on their shoulders. On the other hand, many of the small community pharmacies were excluded from the project despite high level of motivation by the environmentally conscious pharmacists, who actually applied for the participation themselves, but they were excluded on the grounds of negative cost-benefit analysis. The research also noticed that the same principles of dismissing individual and contextual factors could be seen regarding the final target audience of the project – the inhaler users.

Finally, the analysis of the 'Complete the Cycle' scheme this research focused on points out to the lack of proper marketing and advertising as a serious factor that undermined the project success. As it was envisioned that primary actors who would share the information about the project would be the pharmacists and pharmacy technicians ('block leaders' and 'role models'), the conclusion is that the established communication model was too linear and thus quite fragile. Other potential avenues of communication were underexploited (Visser & Crane, 2010; Viglia et al., 2023). The company had set up a project website that many of the customers and pharmacists found to be quite useful, but it was underused because it was not highlighted as a useful resource either by the company or the pharmacists. The same goes for other advertising options, including the posters and leaflets and social media accounts (Bond et al., 2012; Etter et al., 2018; Han & Xu, 2020; Martin & MacDonald, 2020). Finally, the study showed that probably the biggest failure of the project was related to the missed opportunity to engage the legacy mainstream media with the project. The company failed to engage mainstream media apart from local press outlets, which had very small reach. The research points out that this flaw in the design of the project was quite important as it highlighted the detachment of the company from its stakeholders and disabled the company to act in the role it assigned itself in the project – the role of 'public commitment maker' (Goldsmith & Goldsmith, 2011; Abrahamse & Steg, 2013; Young et al., 2017). If the company wanted to make a sustainability commitment to the public (and it certainly did, as all CSR activities by companies also envision both tangible and intangible benefits for the company, such as improved reputation or community trust, etc.), they needed to actually find a way to reach the public. The research showed that relying solely on 'role models' and 'block leaders' was not enough. This empirical development also led to the conclusion that when it comes to corporate sustainability, especially for detached companies and sectors such as pharmaceutical, the mainstream media outlets and their social evaluation and social influence capabilities represent not just an opportunity for companies to improve visibility, but an essential avenue for disseminating sustainability activities, projects, programmes and strategies, mobilising stakeholders and facilitating the overall public debate about sustainability (McCombs & Shaw, 1972; McQuail, 1985; Deephouse, 2000; Norris, 2000; Rindova, Pollock & Hayward, 2006; Fiske & Taylor, 2008; Lang & Lang, 2009; Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017; Barkemeyer, Givry & Figge, 2018; Roulet & Clemente, 2018).

The research confirmed that the mainstream media have a crucial role to play in the process of shaping the public opinion on the matters of sustainability in the pharmaceutical sector, and in the domain of corporate sustainability in general (McCombs & Shaw, 1972; McQuail, 1985; Entman, 1993; Hajer, 1993; Deephouse, 2000; Norris, 2000; Hajer & Versteeg, 2005; Boykoff & Boykoff, 2007; Lang & Lang, 2009; Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017; Osmundsen & Olsen, 2017; Barkemeyer, Givry & Figge, 2018; Roulet & Clemente, 2018; Barkemeyer et al., 2020; Griffith Oliver et al., 2023). After this research had established that pharma companies and their sustainability efforts remained largely unknown because of the obstacles that had presented themselves in the process of direct communication and collaboration with their stakeholders (see Chapter 5; Wanderley et al., 2008; Morsing, 2017; Else, Choudhary & Genovese, 2022), this research proceeded with the qualitative analysis of the mainstream press reports about the sustainability related to the sector (Chapters 6 and 7). Focusing on the sentiment analysis of the newspaper articles, as well as discourse and thematic dissection of the same, the research discovered several interesting things that fall both to the domain of empirical and theoretical contributions to the field. The research was able to chart the overall salience of the sustainability related topics in pharmaceutical context and determine the overall media evaluations of the pharmaceutical companies and their sustainability performance (Chapter 6.4.1). The research then proceeded to examine what were the emerging and dominant themes related to sustainability in the pharmaceutical sector, thus pinpointing what the general public, via the mediator of mainstream media, was actually thinking about when thinking about the sustainability in pharma (Chapter 6.4.2). Finaly, the research expanded the discursive inquiry and focused on capital storylines or essentialised dominant logic keys in which the entire sustainability in pharma discourse was to be understood (Chapter 7).

The research provided the insight that in the period between 2000 and 2020 the media coverage of sustainability in the pharmaceutical sector grew, although not consistently or rapidly, however, the rising trend was noticeable. Presuming that the media salience also meant that the public awareness about the topic grew, this finding of the research corresponds with the overall agreement between the researchers that sustainability became an important topic for the general public in the period (Holt & Barkemeyer, 2012; Fischer et al., 2017; Barkemeyer et al., 2018). It would be difficult to contextualise this rise, as it would be quite hard to cross-examine the number of sustainability related media pieces about the sustainability of the examined companies with the total number of media pieces in the period, either about sustainability in general or pieces about the companies and their other activities. But the general rise of the number of media pieces in the period, established in the research, suggested that the newspapers recognised sectoral sustainability as an increasingly important subject for coverage, thus influencing the shaping of the general public concern (Holt & Barkemeyer, 2012; Barkemeyer, Figge & Holt, 2013; Barkemeyer, Givry & Figge, 2018; Barkemeyer et al., 2024). The research shows that the media articles about sustainability of *GlaxoSmithKline* and *AstraZeneca* were quite diverse in their type, style, depth of analysis, main subject of interest and other important features of a media piece. This also refers to the level of evaluative engagement – some pieces were just simple conveyance of service information (business, scientific, healthcare and even sustainability related) and thus delivered without much judgement. But most of them also included the analysis and evaluation of the corporate actions, including the evaluation of the moral/ethical dimension, very often presented in a simplified ‘they should do/should have done this’ or ‘they shouldn’t do/shouldn’t have done this’ manner, for readership to be able to quickly judge and accept or dismiss the evaluation (Kepplinger, Geiss & Siebert, 2012; Roulet & Clemente, 2018).

The sentiment analysis of the media articles conducted in this research established two important things. First, most of the articles' evaluations were complex, as some actions were praised and others criticized in the same piece, which somewhat contradicts the idea that the media tend to simplify complex realities (Roulet & Clemente, 2018). This points out to the complexity of both the analysis and the problems of sustainability in the sector, but also to the notion that the press should approach the issue impartially (Stempel, 1991; Gentzkow & Shapiro, 2006; Cardon, Stevens & Potter, 2011; Sheng & Lan, 2019), thus providing not just for the information but also the leadership in resolving the issues, based on ethical superiority coming from this position of impartiality (which actually corresponds with one of the dominant media storylines established in this research) (Boykoff & Boykoff, 2007). Second, the research showed that the overall evaluation of the sustainability in the pharmaceutical sector was net positive (more positive evaluations then negative), which roughly corresponds with the overall net positive public perception of the sector in the British public (O'Riordan & Fairbrass, 2008; Fischer, 2009; Goldacre, 2012; Rowe, 2013). This also points out to the close connection between media representation and the public perception (Lewis, 2000; Ohmann, Jones & Wilkes, 2006; Barkemeyer et al., 2009; Lewis, 2000; Clemente & Roulet, 2015).

Research findings provide for the fact that pharmaceutical sector's environmental dimension is neglected in the discursive representation and evaluation of corporate sustainability, which further strengthens the fact that sustainability evaluation tends to be very much related to sector specificities and the perception of its overall usefulness for the particular community and the society in general, the same as with sustainability/ESG reporting (Adams & Kuasirikun, 2000; Veleva et al., 2003; Schneider, Wilson & Rosenbeck, 2010; Goldacre, 2012; Belkhir & Elmeligi, 2019; Iqbal & Keay, 2019; Consolandi et al., 2020; Miettinen & Khan, 2022; Kalia & Aggarwal, 2023; Malmqvist et al., 2023). The research shows that despite the fact that pharmaceutical companies represent significant polluters, being the part of the chemical/biochemical sector as well as part of the healthcare sector, the industry's overall positive societal contributions, in terms of the social significance of their product, their contribution to scientific research and education, and their economic performance and political influence, tend to downplay the condemnation of the negative environmental impact, and justify the negative externalities with the achievement of the 'higher good' and make the corporate environmental actions and strategies seen in a more favourable light than it probably should. The study shows that by focusing on the sector's social and economic contributions (sustainability issues related to core business activities, its social/economic/political significance, fruitful cooperation and collaboration with other societal actors and positive role of corporate executives in the process), praising and positively evaluating good performance and criticising and scrutinising negative performance, in a way obscures the role of impartial social evaluators the media undertook (Deephouse, 2000; Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017; Roulet & Clemente, 2018).

As it was argued earlier, in the pharmaceutical sector the stakeholders cannot effectively act within the framework of voluntary, market-based sustainability governance and thus push companies towards sustainable transformation, as there is a detachment between them and the industry (Orlitzky, Schmidt & Rynes, 2003; Vogel, 2005; 2010; Daley, 2007; Pomering & Dolnicar, 2009; Sones, Grantham & Vieira, 2009; Young et al., 2010; Pirard, 2012; Von Geibler, 2013; Bartley, 2014; van Duuren et al., 2016; Morsing, 2017; Amel-Zadeh & Serafeim, 2018; Heikkurinen et al., 2019; Barkemeyer et al., 2020; Bose, 2020; Pizzi et al., 2021; Else, Choudhary & Genovese, 2022; Linder et al., 2023; Lu et al., 2023). Assuming the role of social evaluators, the media ought to have balanced this structural disbalance and pushed towards the equilibrium, in which the environmental performance of the companies should have been an important issue too (Bennett, 1996; Boykoff & Boykoff, 2007; Roulet & Clemente, 2018). Better environmental performance of the companies is also needed, and media scrutiny ought to have pressured the companies in that particular direction. Rationalisation and focus on social and economic aspects are, of course, normal, but it also theoretically represents the failure of the model that assumes that the media are unbiased and impartial social evaluators and ideal agents of corporate sustainability monitoring and governance.

In the Chapter 7, the research shows that the media were able to capture the main tensions between the pharmaceutical companies and their stakeholders regarding sustainability issues and problems, the ones that raised the barriers to successful communication, understanding and subsequent potential collaboration and joint action towards sustainable transformation. It is established that the main tension was seen in the fact that two completely different logical sets dominated the perspectives of the companies on one side and most of the other stakeholders on the other side (Gamson, 1992; Entman, 1993; Kiousis, 2004; Wanderley et al., 2008; Clemente & Gabbioneta, 2017; Osmundsen & Olsen, 2017; Sheng & Lan, 2019; Graf-Vlachy et al., 2020; Esmann Andersen & Høvring, 2020; Griffith Oliver et al., 2023). In Chapter 7.5.1 it is determined that the companies perceived sustainability issues as important but subordinate to the business logic that entails that companies should prioritise their business activities and benefits for the investors (Towse, 1996; Earl-Slater, 1998; McIntyre, 1999; Gambardella, Orsenigo & Pammolli, 2001; Reinhardt, 2001; Dukes, 2006; Goldacre, 2012; Lakdawalla, 2018; Pisani & Meadows, 2019; Ostwald et al., 2020). On the other hand, in Chapter 7.5.2 it is described that most of the companies' stakeholders did understand that 'business is a business' but prioritised the sustainability issues and problems to it. The research points out that this caused both the conceptual misalignment between companies and their stakeholders but also a sort of competition in ethicality/morality of the taken position (Langtry, 1994; Gibson, 2000; Phillips, Freeman & Wicks, 2003; Kiousis, 2004; Scholz et al., 2018; Sheng & Lan, 2019; MacNeill et al., 2020; Griffith Oliver et al., 2023; Malmqvist et al., 2023). The challenge of the ethicality/morality of the pharmaceutical business model went beyond sustainability and actually had a potential to completely discredit the industry, the way it operates and makes profit, channelling the public discontent and causing significant reputational and other types of damages to companies and the sector, aligning with other 'contested' industries (Galvin, Ventresca & Hudson, 2004; Parker, 2007; Goldacre, 2012; Kessel, 2014).

Recognizing these confrontations, the research showed (Chapter 7.5.3) that the media acted as rapprochement agents, pushing for storylines that could encapsulate all the relevant concerns and harmonize the overall sustainability discourse, by softening the edge of the clashed logics and the fact that they carried ethical/moral superiority and inferiority stigma (Hajer, 1993; 1995; Hajer & Versteeg, 2005; Osmundsen & Olsen, 2017; Alvarado et al., 2021; Else, Choudhary & Genovese, 2022). As established in this research, when the dominance of the stakeholder perspective, which emphasized that societal concerns should always outweigh the corporate profitability, was seen as an obstacle for sustainable transformation, the media asserted the invaluable positive contribution of the pharmaceutical companies to the betterment of the human race and mitigation of numerous social and economic problems, a contribution that would not be possible if the companies did not exist or adhered to their corporate logics (Scherer, 1993; Staropoli, 1998; Abraham & Lewis, 2000; Scherer, 2000; Abraham & Lawton Smith, 2003; Permanand & Altenstetter, 2004; Calero, van Leeuwen & Tijssen, 2007; Wogart, 2007; O'Riordan & Fairbrass, 2008; Goldacre, 2012; Consolandi et al., 2020; Kalia & Aggarwal, 2023; Tang et al., 2023). Similarly, when the dominance of the corporate logic was seen as an obstacle to sustainable transformation, the media pushed for neutralization and emphasized that the economic benefits for companies are only justifiable when companies fulfil their societal duties – bringing benefits to their communities and society in general. Finaly, the research shows that another dominant storyline was cultured, the one that emphasized the necessity for clashing logics to be mitigated by an impartial agent. This storyline reasserted and reamplified the mitigating role of the media, positioning them as public champions and societal honest brokers (Deephouse, 2000; Norris, 2000; Lang & Lang, 2009; Greve, Palmer & Pozner, 2010; Clemente & Gabbioneta, 2017; Barkemeyer, Givry & Figge, 2018; Roulet & Clemente, 2018; Graf-Vlachy et al., 2020; Griffith Oliver et al., 2023).

Following on, the research established that communicational and discursive mechanisms used to shape the dominant storylines to some extent matched journalistic norms described by Boykoff and Boykoff (2007) – first-order journalistic norms (personalization, dramatization and novelty) and second-order journalistic norms (authority-order and balance). These norms ought to have legitimized the bias that media created in their interpretation of the events and stakeholders' positions (because in this particular case, the bias was not seen as *a priori* negative) and thus legitimized the process itself and its final output – storylines and dominant discourses (Hajer, 1993; Hajer & Versteeg, 2005; Alvarado et al., 2021; Else, Choudhary & Genovese, 2022). Boykoff and Boykoff (2007) argued that journalistic norms are universal (could be used to create whatever framing the media is aiming for), and it is certainly true that other various literary devices and communicational mechanisms are very much universal, however, this research had found that specific mechanisms used by newspapers have limited usability, as they depend on whether the newspapers defend the pharmaceutical company, their actions or positions (challenged by other stakeholders), or they criticise the pharmaceutical company in the same manner. The research showed that storyline-building mechanisms that focus on emotional approach to the readers would not be very efficient if used to back the position of the powerful and rich pharmaceutical companies, thus confirming that journalistic norms, communicational mechanisms and literary/logical devices used to establish storylines have to be appropriate to the context and the expectations of the audience (Bennett, 1996; Koller, 2004; Johnson-Cartee, 2005; Skorczynska & Deignan, 2006; Osmundsen & Olsen, 2017).

In summary of this research, based on sound theoretical considerations and extensive empirical research, grounded in a specific sectoral context and temporal and geographical settings, this thesis both confirms and challenges several existing postulates. It supports the notions that: 1) Corporate sustainability is an important issue for all societal actors and that its importance (and focus on) is growing; 2) Pharmaceutical industry is inherently ambiguous in the eyes of its stakeholders and generally unknown to the general public and that it is difficult to establish communication and cooperation, even when that is the universal desire; 3) The media will assume the role of social evaluator and mediator when interpersonal (interorganizational) contact is difficult; 4) The media will use its powers and different tools to try to provide a mediated discourse that is balanced and acceptable for all actors, fostering the creation of discourse coalitions (hence the real-life political coalitions) and strengthen the social cohesion and public readiness to engage in solving the important societal problems.

Simultaneously, this thesis challenges the existing postulates: 1) Despite the assumption that most effective utilisation of the social influence principle in the dissemination of the sustainability-related multistakeholder projects is interpersonal contact, it showed that it really depends on the characteristics of considered social influencers and the contextual circumstances in which they operate; 2) The previous conclusion points out that very often the mediated contact is the most efficient avenue of sustainability communication, and certainly the best (most efficient) way is the combination and supplementation of the two (interpersonal and mediated); 3) Contrary to the assumption that pharma stakeholders tend to prioritise the sustainability issues that are most consequential for them personally, the research shows that stakeholders are very much invested in those issues that are both related to the core competencies of the sector, as well as those that are having the strongest societal long-term impact, even if they are not directly influencing them; 4) As one of the main theoretical characteristic of storylines is that they are created and used in order to simplify and intensify the dominant discursive justification for mobilizing various actors to form discourse (thus real political) coalitions, in order to confront and subdue opposing discourse and political coalitions, this research showed that storylines could also be created to reconcile opposing discourses, with nuanced acknowledgement of the validity of the dominant logics of the confronted discourses, but with that validity evaluated through the lens of the wider societal benefit and the need for the creation of the 'meta' discourse coalition for the purpose of meaningful successful sustainable transformation.

9. Chapter 9 – Conclusion

This research embarked on the quest to explore several important issues regarding the stakeholder relationships within healthcare sector related to the process of sustainable transformation, dividing the overall research efforts into three separate studies. The first study focused on communication and cooperation between pharmaceutical companies and their stakeholders via the interpersonal medium of social influencers in a multi-stakeholder sustainability project context, exploring the advantages and limitations of such an approach and its effect on the visibility and understanding of corporate sustainability. The second study analysed the mainstream printed media representation of corporate sustainability in the same setting, focusing on the process of agenda-setting and framing and the establishing the dominant sustainability themes the media had shaped, thus forming the 'general knowledge' and public perception about the topic. The third study followed up and focused of the dominant sustainability storylines in the mainstream media and the mechanisms of their articulation. In this chapter, the overall research effort is summed up and general contributions of the research are pointed out, certain limitations of the research are addressed, the possible avenues for further research are proposed.

The first study of the research represented a case study analysis of the sustainability related project 'Complete the Cycle', conducted by the British pharmaceutical company *GlaxoSmithKline* with its partners in the period between 2011 and 2020, focusing on mobilising their customers to return used inhalers to the pharmacies for recycling, by engaging the pharmacists to inform and support the customers in this process. The study was built upon the theoretical grounds of social influence theory, which states that respected and influential members of the community can act as facilitators of sustainability related actions and initiatives in interpersonal interactions with members of their community. The study had found that the success of such projects depended on whether the right choice of who was going to act as social influencer was made and whether the personal and contextual circumstances that affected both the social influencers and the target audience (the customers) to engage in the project was taken into account. The study also highlighted that neither enthusiasm nor values of the social influencers and the participants can overcome the lack of organisational and logistical support and the lack of communication avenues that are not interpersonal (such as the communication and advertising via mainstream or social media platforms).

Understanding that in the domain of corporate sustainability of the pharmaceutical sector mainstream media play the important role of social evaluators, the second study analysed how did the mainstream national newspapers frame sustainability related issues regarding two British pharmaceutical companies (*GlaxoSmithKline* and *AstraZeneca*) in the period between 2000 and 2020. The qualitative analysis of the newspaper articles from the period showed that the media interest in sustainability grew over time, but not dramatically or consistently, and that the coverage depended on specific company-related developments. It also showed that the media exercised their agenda-setting and framing capabilities according to what they saw were their duties – they allowed stakeholders to communicate and exchange ideas and encouraged them to act. The media did not take firm position on issues, neither moralistic nor pragmatic, but allowed different perspectives to be heard. However, they did endorse and support certain outcomes and developments, framing them as something that should be the points of agreement between the companies and their stakeholders. By doing this, the media addressed the market failure that represented the core of miscommunication between the pharmaceutical sector and their stakeholders related to the evaluation of their sustainability performance and strategy.

Regarding the dominant media frames, the research managed to identify those that constitute the dominant media discourse related to sustainability and the pharmaceutical companies: 1) Focus on core business (R&D, medicines efficacy and safety, access to medicines, pricing and distribution, anticipating future health needs); 2) Socioeconomic and political significance (value creation, investment, business models, long-term stability, stabile profits, taxes, contribution to national economic growth, having socially valuable and appreciated products, saving and improving the quality of lives, supporting science and education, being strategic industry for UK, generating political capital, forging relationship with the government); 3) Communication and cooperation (with government, universities, NGOs, local communities, international organizations, competitors and media); 4) The importance of corporate leadership (personal engagement, influencing company culture, logic and strategy, thinking about corporate and personal legacy). Another interesting finding was that the environmental segment of sustainability was being somewhat neglected, as other segments were seen as more important in the particular context.

The third study continued with the similar approach and using the qualitative discourse analysis of the articles from mainstream British newspapers from the period between 2000 and 2020 about sustainability of the two British pharmaceutical companies, *GlaxoSmithKline* and *AstraZeneca*, it sought to explore what dominant storylines were created by the press and in what way. Storylines were understood as overall dominant logic or keys in which the issues and topics of sustainability in the pharmaceutical sector should have been read and understood by the wider public. By shaping and pushing the dominant storylines, mainstream press also shaped the dominant discourses about sustainability issues, influencing the general public opinion and bringing the different interested stakeholders closer together, facilitating better understanding, communication and joint action. The study identified three dominant storylines: 1) Moral superiority barrier; 2) Business logic barrier and 3) Leadership in mediating confrontation. Each of the dominant storylines was built using different communicative, rhetorical and literary devices, tools and journalistic norms, but some mechanisms were found to be more suitable for shaping of particular storylines. Where stakeholder moral superiority was seen as a barrier for sustainability, the newspapers defended the companies using mechanisms that focused on corporate intentions and commitments rather than performance and on mechanisms that pointed out that core of every business was to sustain a profit. Where the dominance of the business logic was seen as a barrier for sustainability, the newspapers focused on either counterbalancing the business logic with either stakeholder expertise or high reputation, or by personalisation and emotionalising the tone of the debate. In the discourse in which the media sought to assume the leadership in resolving the confrontations between the stakeholders, different assertive mechanisms were used.

9.1 Contribution

The research has several important contributions – theoretical, empirical, policy-related and practical. On the theoretical perspective, the paper contributes to the body of literature on sustainability – how different organizations, companies, industries, media and their stakeholders contemplate and conceptualize what sustainability is, how this understanding is developed and created and how it evolved over time. The findings are especially relevant because they prove that understanding and framing of sustainability is very much sector-sensitive and stakeholder-sensitive and the examination of sustainability in the pharmaceutical sector, especially in the context of stakeholder engagement, has been rather poor. Related to the literature on mass media, the research deepens the knowledge on the role and power of the printed mass media as an infomediary agent and media agenda-setting and framing regarding sustainability, especially in a sector-specific context. Special contribution of the research is related to the expanding of the knowledge on storylines in the media context, as the storylines have been previously mostly used to explain how sustainability discourses were being forged in other contexts (scientific community, policy makers, etc.), but not the media. Related to the literature on stakeholders, the paper provides an insight on barriers in stakeholder communication, stakeholder salience and stakeholder cooperation, especially the social evaluators and social influencers as facilitators of sustainable transformation projects. Literature on social influence is expanded by providing an account on barriers and contextual difficulties in the process of diffusing the social influence in sustainability related multi-stakeholder projects, as well as generally addressing the social influence approach to behaviour change in the context of corporate sustainability (as previously social influence was mostly analysed in the contexts of corporate advertising and marketing).

On the empirical side, the paper expands the knowledge on particular pharmaceutical companies and industry in general, which is very useful as pharmaceutical industry has rather specific characteristics and is often omitted from academic research. Because it operates under different rules and because the stakeholder relationships are quite different to other industries, pharmaceutical sector is rarely chosen as a research setting. In this sense, the research could be very useful for the corporate sector, in the process of contemplating, devising and implementing sustainability strategies and policies and communicating these to others. Thus, this research could have a set of positive policy-related and practical implications for pharmaceutical companies and the sector in general.

Finally, the major contribution of the research lies in the domain of practical implications and policy development, especially for the businesses. Businesses are limited in their communication opportunities and are heavily reliant on other actors to convey their message to the stakeholders (thus influencing the overall perception and evaluation of the company), especially regarding issues such as sustainability strategies and performance, which represents a basic failure of the market-based evaluation principle (Redclift, 2005; Vogel, 2005). As societal actors and company stakeholders evaluate corporate sustainability performance via media representation, it is crucial for businesses to better understand how these media representations are being developed and framed, and how are different dominant storylines emerging to form dominant discourses. Better understanding of the process leads to better communication, useful feedback and overall better relationship with stakeholders.

There is a wide set of very practical recommendations this research could provide for engaged stakeholders. When it comes to pharmaceutical companies, some of the advice this research proposes could be summed up in the following statements: 1) In the process of devising and planning sustainability projects, the companies should consult other stakeholders, especially the ones who would be mostly affected by the project or who would be implementing it, as this would provide for valuable feedback and establish the viability and efficiency of potential partnerships. 2) During the implementation of sustainability projects, companies should anticipate the needs and provide full support to those who are expected to execute the project, mobilizing the significant resources the companies have access to and other stakeholders do not. 3) It is not enough for companies to act as ‘shadow’ facilitators in sustainability projects, providing for money and logistics but not interfering in the process itself, because partners often lack resources to connect among themselves and conduct the project, and especially to advertise it. 4) Pharmaceutical companies are in the position to strengthen their grounding in those aspects of sustainability performance that are seen as important (sector-wise) by the public and evaluated positively, but also to improve their communication related to those that are seen as less relevant (for example, environmental performance), which could lead to better feedback from the public but also reputational gains for companies. 5) Understanding that the mainstream media is not positioned as an antagonist to pharmaceutical companies, but is willing to serve as a medium for communication and reconciliation, should be used as an opportunity to expand the stakeholder dialogue and as a valuable avenue for corporate communication. 6) The overall societal agreement related to sustainability, that private enterprises need to reconcile two seemingly opposed goals – making profits and taking care of the environment, economic growth and social institutions – should be understood as a positive signal that the private sector is welcomed to be a part of wider sustainable transformation and that this embedded paradox is accepted as a default, which allows companies a manoeuvre space for adjusting their long-term business strategies in such a way to reduce or minimize the cost of transformation.

Recommendations could be expanded to other stakeholders as well. For the media, it accumulates to following points: 1) The media should understand that their role in shaping the overall discourse about sectoral sustainability is crucial and should thus strive to be more proactive and not just reactive (following up on specific events and issues raised either by companies or stakeholders), as sustainable transformation is rightfully understood to be one of the crucial societal goals; 2) The way the mainstream media build storylines and shape public opinion on sectoral sustainability (or corporate sustainability in general) strongly influences the capacity for rapprochement between the stakeholders, which is crucial for smoother communication and cooperation between them, and that the media should seek to use that power for sustainable pushing of the sustainable transformation agenda. Regulators and governance bodies should realise that any type of sustainability programme or project is less likely to succeed without institutional support and firm regulative frameworks and should act to support potentially successful initiatives that come bottoms up, and subsequently, build frameworks and regulations around positive experiences and learn from unsuccessful ones. As for other stakeholders (in the case of this research – the customers, medical professionals, pharmacists, etc.), they ought to understand that their power of social evaluation and influence is essential for both the shaping of the corporate sustainability discourse and the implementation of the sustainability projects and programmes. Their capacity to articulate and communicate their demands and opinions is picked up and resonated by the actors who have the power to influence the public opinion and thus influences the corporate sector.

9.2 Research limitations

This research represents a significant contribution to the research field, but it is bounded by several significant limitations too. The limitations are mostly related to the specific research design and changing and expanding some of the research design features could be beneficial for further development of the knowledge on the subject. In this sub-chapter the limitations of the research will be elaborated in detail, focusing on the methodology, the theoretical grounding, the issues of sources used for the analysis in the study, the choice of the research setting, and the choice of the analytical tools used.

The first limitation of the research is related to the choice of the methodological approach. The first study conducted within the thesis was the case study analysis of a single sustainability related project. The case study approach certainly has its merits, as it allows for an in-depth analysis with the possibility of all the factors influencing the case to be taken into account, but the limitation is that the possibility for overall generalisation of the findings is somewhat restrained, as other cases might have played out differently. The case study approach also influences the limitations in the collection of data, as the collected data pool might not be seen as sufficient enough to make sound conclusions. Other methodological approaches or even a multiple-case study could have allowed for more media articles and more interviews, thus a better grounded and more generalisable findings. The same goes for any type of qualitative research, where content, discourse and sentiment analysis were used as main analytical tools. In this particular research all the data were manually coded, and although the qualitative analysis software was used, the entire coding process relied upon the researcher and his abilities and capabilities and his understanding of both theoretical and empirical concepts. The qualitative analysis software nowadays provides for tools that can analyse the large portions of text in such a way to provide for better consistency and overall integrity (text mining, machine learning, etc.), thus making the overall study sounder.

The methodological and analytical structures of the research determine what type of data and how much data is to be collected. In this research, the scoop of mainstream printed media collected and analysed was fairly limited and the research could have benefited from the expansion of the source pool. When it comes to the newspapers used in all the studies of the research, the *Nexis* database was used to search and collect all the articles within the timeframe which were published in the following newspapers and magazines: *The Guardian* (including *The Observer*), *The Times* (including *The Sunday Times*), *The Financial Times* and *The Pharma Letter*. The decision to choose these particular outlets was sound and explained in previous chapters, but there was still room to expand it with other relevant British mainstream newspapers, such as *The Daily Telegraph* or *The Independent*. There were also limitations in using available online news databases, as such databases often struggle with issues such as storage, information retrieval and access, which is something that is very visible when one, for example searches different databases with same expressions, only to realise that the number and type of retrieved items significantly differs (Buntain, Liebler & Webster, 2023). However, with that taken into consideration, there was no other way to efficiently search newspaper articles by the selected criteria. One way to moderate this problem might be to use two different databases for verification, but this poses a lot of practical and material problems.

Another issue with data collection is the fact that in the process of searching for relevant articles the search criteria could possibly be seen as being too narrow (“sustainab*”) and adding other sustainability related terms (“environment*”, “ecolo*”, etc.) could have expanded the source pool and point out to certain developments that might have been missed in the original research. It is absolutely true that some newspaper articles that dealt with different sustainability issues and problems were missed because of this, simply because the words “sustainable” or “sustainability” were not used in the text. However, using more different expressions in the search would have complicated the entire process and also it would have, to some extent, derailed the research from one of its original intentions – to address the issues related to semantic and symbolic ambiguity surrounding the very terms “sustainable” and “sustainability”. If the research wanted to discover what do newspapers actually write about when they write about “sustainability” (related to the pharmaceutical sector), it makes sense to stick with the original phrase when searching for data.

One of the limitations of the research is that the research setting was set to be quite specific – it was positioned in a very unique industry/sector setting and a very specific geographical and temporal context, thus it could be argued that such an approach could account for the results that might omit certain developments that could be seen as relevant. One could justifiably argue that the positioning of the research in a wider setting (for example, by looking at the entire business sector instead of just pharmaceutical sector) could have provided for better and more complete findings. However, the uniqueness of the sector and its specific traits, especially related to possibilities of stakeholder contact and communication, was precisely the advantage that pointed out to the gaps in the existing research and allowed precise research questions to be raised. The approach that would have neglected the fact that not all business sectors are the same would have also disqualified the variables that arise from those specificities and that had affected and driven certain developments that were recognized in the findings and elaborated in the discussion.

The same goes for the geographical context – maybe the results would have been different (or seen as more robust) if companies from other countries were examined too. This is something that is certainly a possibility for further development of the research, as it would be interesting to see if the findings would hold in other contexts. However, it made sense to limit the research to the political, business, social and media ecosystem of a single country, as the original assumption was that in a more cohesive social environment (such as a single country), important issues such as sustainability would be examined and debated with more vigour and enthusiasm, with higher attention from both the national media and the general population. As for the temporal context, one could argue that the timespan of the research could be longer, including the previous period, but also the period after 2020. This is also a good idea for future possible expansion of the research; however it would pose for certain difficulties. Covid-19 outbreak would have certainly affected the findings as the context would have been dramatically affected by such a disruptive event, especially for a pharmaceutical company.

Finally, the choice of two particular companies for the analysis might have impoverished the potential findings, as other pharmaceutical companies, that were skipped, might have dealt with different sustainability related issues differently. This is certainly true, especially as different pharmaceutical companies pursue different business models, have different corporate cultures and views on sustainability. Even if certain traits are specific for the industry/sector, sustainability issues heavily depend on what a particular company does (for example, a company that develops and produces antiretroviral drugs would have issues with drug availability and pricing in poor countries, but a company that does not simply would not). However, choosing the companies that have a firm footing in an economic, social and political setting of a particular country has its merits, as such companies are considered to be important part of the economic, social, political and scientific establishment, thus their strategies and actions are sure to make impression on stakeholders and general public.

9.3 Possible avenues for further research

The limitations of the thesis that were presented in the previous sub-chapter can also represent opportunities for further fruitful research. The possible avenues to expand and follow upon include exploring the opportunities in methodological approach, theoretical grounding, in choice of the subject of the examination and different and wider approach to data analysis. Concerning the methodological approach, it is possible to move beyond the single case study and proceed to multiple case study approach, that would provide for more variety in data and thus the more nuanced findings. More cases mean more interviews, more newspaper articles, more social media posts, which would enable possible new findings that might have been missed out. The shift in the methodological approach could also include more comprehensive usage of the tools that are provided by the qualitative analysis software. Also, there is a possibility to quantify some of the data and thus transform the purely qualitative research into a mixed-method study.

Various different theories could also be tested in the proposed setting. In the process of literature review, many interesting theoretical angles emerged, but most of them were reluctantly abandoned, as at the time it seemed that they were complicating the research process. Apart from the theories considered in the research, the institutional theory provided some compelling opportunities, for example, the inability of the stakeholders (especially pharmaceutical companies and their customers) to establish meaningful communication and cooperation could have been viewed from the perspective of institutional fields and institutional field logic. To meet stakeholder expectations, the companies and their stakeholders need to have an understanding of the ideas, goals, policies, agendas and actions and they have to communicate between themselves. Misbalance between the understandings of complex issues, agendas, motives and actions between the companies and its stakeholders is, paradoxically, normal. It comes from the fact that organizations and its stakeholders have different motives, level of knowledge, information and priorities. Indeed, organizations and their stakeholders might not share the same norms, as they belong to different operational, normative or even philosophical spheres or fields and thus do not share the same field-level logics (Bourdieu, 1993; Haveman & Rao, 1997; Thornton & Ocasio, 2008). This leads to one very common problem – the logic of a field in which a particular organization operates clashes and contradicts with logics of the fields in which other stakeholders operate (Seo & Creed, 2002). This causes misunderstandings and general ambiguity about the organization's motives, ideas, policies, strategies and identity (Roulet, 2019). In the case of sustainability, the companies and their stakeholders might have completely different understandings of what sustainability means, or to be more precise, for two of them it has a different meaning.

Another interesting theoretical possibility that was considered in order to explain the need for mass media to interpret the corporate actions to other stakeholders was the translation theory. Between companies and other stakeholders there are communication intermediaries and because of that, perspectives of companies and other stakeholders on different issues and ideas (such as sustainability) significantly differ. Theory of translations is one theoretical approach that tries to explain how this misbalance and misunderstanding occurs. When different ideas, practices, agendas or policies are circulating between organizations, individuals, or across time and space, they are being negotiated between stakeholders and they change (Wæraas & Nielsen, 2016). Complex notions and ideas cannot just be diffused in a linear process, they are altered and changed as they travel from one individual to another or from one organization to another, or across space and time (Mueller & Whittle, 2011). They are effectively being translated in order to accommodate the recipient (Wright & Nyberg, 2017), and thus they are modified as a recipient needs the idea or notion to fit their unique needs in a particular moment in time or in space. This transformation is usually not planned or deliberate, but the result of the communication and interaction between the different mediators, who all have their own ideas and agendas (Hultin, Introna & Mähring, 2021), and printed mass media could be seen as such mediators. Anyway, these theoretical possibilities were abandoned but they definitely have the potential to either sharpen up the existing research or to open up new questions that could lead to fruitful supplementation.

When it comes to units of the analysis, only two companies were selected for the research and associated projects examined and sustainability themes and storylines identified. Inclusion of other major pharmaceutical companies could provide for more detailed accounts of different empirical sustainability related developments and problems, and thus make the knowledge more nuanced. Future research employing a larger and more diverse sample of companies could corroborate the main findings (more companies from the same country or perhaps foreign companies doing business in a particular country), and possibly explore how emerging sustainability themes and dominant storylines are related to e.g. country-level differences or specific company-level characteristics. Including other similar or different countries could tell more about what is universal about the findings and what is contextual. It would be interesting to see if, for example, things would unfold differently in France, or in the United States, or perhaps in countries where sustainability is still not one of the top corporate priorities, such as the developing nations. Future research on the topic could also expand the source pool by including other national and international mainstream newspapers (*The Independent*, *The Daily Telegraph*, etc.) or even other types of media outlets that have national relevance and influence, such as broadcasting media (*BBC*). Another research avenue could be the extension of and temporal context – by expanding the timeframe more could be learned about the historical evolution of the emerging sustainability themes and sustainability frames as well as historical contexts surrounding it.

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11. Appendices

11.1 Appendix 1 – Approval for research by BESS+ FREC

Dear Dejan Zec

Your research ethics application reference: 0997

Your research project: The circle of sustainability public perceptions and evaluations of sustainability issues and their influence on shaping and implementing sustainability-related policies

I am pleased to inform you that the above research ethics application has been reviewed by the Faculty Research Ethics Committee (FREC) for Business, Environment, Social Sciences which has issued a favourable ethical opinion based on the application submitted. **Please retain this email in your project file as it is evidence of the Committee's approval.**

Matters you should note:

- Ethics approval does not infer you have the right of access to any member of staff or student or documents and the premises of the University of Leeds. Nor does it imply any right of access to the premises of any other organisation, including clinical areas. The Committee takes no responsibility for you gaining access to staff, students and/or premises prior to, during or following your research activities.
- It is your responsibility to comply with all relevant Health and Safety, Data Protection and other legal and professional requirements and guidelines.
- You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, risk assessments and other documents relating to the research project. This should be kept in your project file.
- Audits are undertaken on approved ethics applications. Your project could be chosen for such an audit. You should therefore ensure your project files are kept up to date and readily available for audit purposes. You will be given a two week notice period if your project is selected.
- Please always include the above research ethics application reference in any correspondence with the Research Ethics team.

If you need to make **amendments** to the original research project as submitted you are expected to seek approval from the Committee before taking any further action. Changes could include (but are not limited to) the project end date, project design or recruitment methodology, or study documentation. Please go to https://secretariat.leeds.ac.uk/research-ethics/how-to-apply-for-research-ethics-amendment/ or contact the Research Ethics team for further information at Research Ethics.

I hope your research project goes well.

Best wishes,

Ms Taylor Haworth, Phoenix Lead, Research Ethics, Secretariat, University of Leeds

On behalf of Dr Judith Hanks, Chair, BESS+ FREC

11.2 Appendix 2 – Details about interviews for Study 1

Participant	Details	Interview	Interview length
A	Retired nurse from north London area, long-time inhaler user	17 July 2024, online, via *Twitter*	34 minutes
B	Teacher from Dorset, long-time inhaler user	15 July 2024, online, via *Facebook*	45 minutes
C	Clinical pulmonologist and pharmacologist from West Yorkshire, vast experience with inhalers	11 June 2024, online, via *LinkedIn*	48 minutes
D	Pharmacologist, pharmacist and respiratory medicine educator	3 July 2024, online, via personal blog	36 minutes
E	Respiratory expert, vast experience in treating respiratory diseases, also inhaler user	30 June 2024, online, via *Twitter*	41 minutes
F	Company key account manager from Monmouthshire, engaged with the project	15 May 2024, online, via *Facebook*	38 minutes
G	Pharmacy technician from Sussex	2 July 2024, online, via *Twitter*	35 minutes
H	Logistics and transport worker from south Yorkshire, engaged in the project	28 May 2024, online, via *Facebook*	22 minutes
I	Retired environmentalist from Norfolk, long-time inhaler user	1 July 2024, online, via *Twitter*	36 minutes
J	Pharmacist from Wales, both community and clinical setting experience	20 May 2024, online, via *Facebook*	42 minutes

11.3 Appendix 3 – Interview guidelines for Study 1 (schedule and some questions)

The overall idea is to have semi-structured interviews with people who had participated in the 'Complete the Cycle' program, in any capacity. There would only be one interview meeting, held online, via *MS Teams*, lasting approximately between 30 and 45 minutes.

The process is as follows:

1) Identification of potential interviewees, via *LinkedIn*, press articles, social media, etc. The idea is to approach people who had been engaged in the 'Complete the Cycle' program and who advertised this participation wilfully and on their own.
2) Contacting the potential interviewees via e-mail or private messages, informing them about the research and asking if they were interested to participate.
3) To those who respond and declare interest to be interviewed, a detailed information about the project and the process will be provided (Information Sheet and Consent Form).
4) The interviews will be scheduled according to the availability of the participants.
5) The interviews will be conducted online, via *MS Teams*. Transcripts of the interviews will be made. The interview is designed to be semi-structured, with the idea for participants to talk about their experiences as freely as possible, with a list of provisional questions.
6) However, some of the questions to be asked and topics to be addressed are (list not extensive):

- Name, position, education, working experience and general questions to determine the level of the engagement in the project and the competence to talk about the project itself. Also questions about personal values and opinions on environmental and sustainability issues.
- Questions related to the perception in the project: How did you find out about the project? Did you know about it before your institution became part of it? Did you already have experience with similar projects? Did you have cooperation with the partner company before? Etc.
- Questions about personal engagement in the project: How did you feel about being part of the project? Was it much more additional work? Did you feel you were making a meaningful contribution? Did you think the project was successful? Etc.
- Questions related to communication and cooperation with other stakeholders about the project: Did you talk about the project with your customers? How did they respond? Were they interested? Did they get involved in the project themselves? What was the response rate? How many people did bring their inhalers for recycling? How did you feel about engaging with customers related to this project? How do you think they felt?
- Questions related to the level of support for conducting the project: Who was responsible for the logistics of the project? How was your communication with them? Did you have enough materials to distribute? How was their communication? Did you communicate directly or via management? Etc.

7) After the interviews are conducted, the recordings will be transcribed and anonymised and the recordings will be deleted.
8) The transcriptions will then be coded and analysed and transcripts themselves stored on *University of Leeds* library repository, accessible upon request.

11.4 Appendix 4 – Interview example for Study 1 (Participant C)

Interviewer: Testing. It works.

Participant C: Hi Dejan, how are you doing?

Interviewer: Hi. Hi. It's a pleasure to meet you and thank you very much. Thank you so much to, to accept, to talk to me.

Participant C: Oh, you're welcome.

Interviewer: Just let me see if… If the transcription works because I haven't used it so far. So let me see.

Interviewer: I'm supposed to see it on my right. OK here it is, it shows transcript. Perfect, it works. Thank you.

Participant C: You got it. Brilliant. Makes your life easier.

Interviewer: Yeah. Yeah, it does. Otherwise, before I used to record it and then I'd have to listen to it so, so many times and but it works as a charm, as far as I can see.

Interviewer: OK. Thank you very much once again to accept to do this.

Interviewer: I would like to introduce myself and tell you a little bit about what I do and then yeah, if you have any questions about that or any reservations. So, I'm a PhD candidate at *University of Leeds Sustainability Research Institute*, but also I'm doing a split site PhD with *Kedge Business School* in Bordeaux in France. So it's like a double degree kind of thing. So it has this sustainability perspective but also business perspective and I'm basically interested in how different actors in the field of healthcare understand what sustainability is.

Interviewer: And what are the priorities and how they communicate with each other related to that, with the hope to create some sort of guidelines… Let's call them guidelines that can make this entire process sort of smoother and better for everyone.

Interviewer: I stumbled upon this project called ‘Complete the Cycle’ and it seemed as an interesting case study where I can see because it has a very sort of clear idea what should be done and who’s supposed to do what. And it has a starting point, and eventually it was discontinued. And so I started as OK, let’s see what I can find about the project itself and find people who were involved in organisations and just talk to them and let see what happened and what were the…

Participant C: Yeah, yeah.

Interviewer: Yeah. I’m not trying to get any sort of confidential business information. I’m not interested in that. I’m just basically mostly interested about interactions with other organisations and with the patients.

Interviewer: As for the technical stuff, this record, as soon as I checked the transcripts, everything will be deleted. We will not keep the recordings, and everything will be anonymised because we basically don’t need any user personal information. OK, if you have any questions, please don’t hesitate to ask.

Participant C: All sounds good to me.

Interviewer: OK, perfect. Well, let’s start. This is going to be basically like a semi structured interview. I have a like a list of questions I would like to ask, but anything that comes to your mind that you think might be important or that you just remember is something that was striking. Please don’t hesitate to drop it or don’t hesitate to mention it.

Participant C: Yeah.

Interviewer: My first question is… For you to tell me a little bit more about yourself. Your education or work experience, things like that.

Participant C: Yeah. So I'm a pharmacist. I qualified as a pharmacist in 2000. And I have a doctorate at DPharm in in pharmacy and I did that looking at asthma, severe asthma and the inhaler technique, and I completed that in about 2015-ish, I think so. And I've been working here in [REDACTED: West Yorkshire] now for coming up to 22 years. Probably about 20 years of that in respiratory, so. Yeah, I've got a bit of quite a bit of experience in inhaler, inhaler devices and head technics. Want to buy something like areas of particular interest, really. So, I've written a few papers on it and done a bit of work on this. And yes, I mean obviously I'm involved in patients experience with the inhalers making sure they're using them correctly. They're the right devices, but more recently it's been looking at actually that inhaler sustainability.

Participant C: In a way that I don't think the *NHS* addresses it right, right, they're going. We need to use low carbon devices that put people all on dry powder inhalers.

Interviewer: Yeah.

Participant C: But really, it misses the patient in that we end up giving people inhalers he can't use. We're not showing him how to use it. They have worse Disease Control. They're more exacerbations, more hospital admissions, which has a higher carbon impact. So, I'm very much like about checking people's inhaler technique, find the device. They can work, which usually will be a dry powder device because most people can't use an MDI, but because you've got it through it with a patient, the patient is a full cursor sent to the consultation. It means actually it improves their Disease Control so they don't exacerbate. They don't use their reliever as much.

Participant C: But then the other thing we don't do very well is that end of life cycle of the inhalers in terms of the recycling. So, we signed up to the *GSK* 'Complete the Cycle' project when it was around. And then it got discontinued and I had a lot of discussion with *GSK* about that because I thought it was a real retrograde step.

Participant C: And so we've just started new recycling scheme within the hospital here. So, we're just, yeah, I'm happy to discuss any of that as a bit of background.

Interviewer: Perfect. Also, before we start about the project itself, I was interested in your personal sort of feelings towards the issues such as sustainability and environmentalism. How important is that to you?

Participant C: I think anything that we consume is going to have an environmental cost and inhalers do as well. So, there's a quite a bit of data published that there is an environmental impact of any inhaler device. The one that has really been looked at the most has been the carbon footprint of inhalers which relates to the propellants. It's used in the devices. But the thing that gets overlooked. From that actually is that. It's the other harms from them. So you dry powder inhalers. They contain a lot of plastic. There are data showing that actually there is a there's an environmental impact, an environment. How to inhale this is worse than MDI's and a lot of other areas like fossil fuel depletion, marine eutrophication, and all that stuff like the plastics are leaching out when it goes into landfill. So, there's all those different harms that that you can get. And my perspective has always been like the best advice for the patients, the device they can use and that will end up being the lowest environmental impact of an inhaler for that individual patient.

Interviewer: Yeah. OK.

Interviewer: How about, like the personal things? Do you recycle? I don't know if it's something that is mandatory in the UK, probably yes.

Participant C: Yeah. So, we have a recycling bin at home. We recycle what we can. So where I live we can't recycle recycled glass, so I have to take that to the tip every three when I get round to it, so I recycle. That's all I can.

Interviewer: Mm hmm.

Participant C: I recycle paper, cardboard, plastics and then I only live about a mile from the local recycling tip, so it's actually not too far to get to.

Interviewer: Hmm.

Participant C: So I do go there a lot and I've got a garden waste bin as well. It's I do what I can and there's probably more I could do.

Interviewer: Yeah. OK. Fair enough. Thank you very much.

Interviewer: I also I would like to finish this section of with a kind of a slightly philosophical question. Maybe. So, who do you think should be the most responsible for, let's say, recycling? Out of all the stakeholders who are involved, like the producers and the consumers, or the governments? Who should impose that kind of thing? Local authorities? Who do you think like should be the most responsible one?

Participant C: That is a good question. I mean, I always think it's everybody's business.

Participant C: I mean in terms of the manufacturer, I mean in pharmacy we see it a lot that there's a lot of medicines are over-packaged and they come in lots of plastic wrappers and big boxes and more than actually it really needs. But it feels like it needs so that responsibility. But we know that recycling isn't done particularly well enough by the general public and people with health conditions. Anything that makes it difficult to recycle those inhalers – it's just not going to happen. I suspect a lot of it just goes into landfill. So, there does need to be a way that the commissioners potentially could try commission recycling projects, so whether that is done on healthcare commissioners or whether it's done by the government in councils to take that. I think it's very difficult for Councils because it's all medical waste. So, there's…

Interviewer: Yeah.

Participant C: In terms of handling medicines it's more complicated than your household waste. So, I think it's a bit of everybody.

Interviewer: OK. Thank you very much. OK. Let's move to the project itself. Can you describe what was your role in the project or how did it work for you?

Participant C: Yeah. So, *GSK* had that scheme. So, we signed up for that. I got one of our senior managers to sign up. We had to get escalated up the chain for the appropriate person to sign it. And I try to do all the publicity and promotion around the hospital. We had a box where we collected all the inhaler returns from ward and from clinics. We had to have them in pharmacy at our two main hospital sites. [REDACTED: Big hospital in West Yorkshire], we had posters that were put up around the wards and in the clinics, to advise people about recycling, we'll try to make it as easy as possible.

Participant C: Wards have a green what we call a green return spend. So any part used or unused medicines, the ward staff nurses just put all those medicines in those bins. They come down to pharmacy when they're full and we have staff who would go through them. Any medicines that could be reused and put back into stock would do any inhalers that were part used, they would go in the recycling bin. And when that recycling bin in pharmacy was full, we use a company which I think was *Movianto*. I would ring them and they would come in, collect it, and then *GSK* would take it away for the recycling scheme.

Participant C: Now, off the top of my head, I can't quite remember how true a recycling scheme it was, because a lot of pharmaceutical waste at the moment committed pharmacies have a scheme return you use medicines to return your inhalers to community pharmacy, but they just get incinerated with energy capture. It's not truly recycled and I count for the life of me remember whether the 'Complete the Cycle' did that, or whether they extracted the propellant gases to reuse, or how much of the plastic could be recycled.

Interviewer: Yeah, this was one of my sub-questions… When you later on communicated and advertised that to the patients did they ask? OK, what is going to happen with the inhalers? Or did you know actually what was going to happen?

Participant C: Yeah, patients didn't really ask. They just did it.

Participant C: We gave the inhalers and we put them away and no questions were really asked. It was kind of just in the way that when patients take, they use medicines around Community pharmacy, they don't really ask what happens to it. I mean, sometimes they will ask do any of these medicines get reused or can we send them to Africa to be used there. But I mean patient returns have been in patient homes, we can't.

Interviewer: I was wondering about the support you got from the company in this particular process. Did you get you mentioned posters for example. Is it something that they provided?

Interviewer: Any sort of advertising, social media stuff, media stuff?

Participant C: Yeah. *GSK* gave us a load of posters about 'Complete the Cycle' and recycling scheme. So we had them in pharmacy. I had them in our respiratory chest clinic at the hospital. And I think we won't have got huge quantities. I think we probably put some more than respiratory wards as well, which some of the main uses. But the I doubt we'll have had more than 10 or 20 posters.

Interviewer: OK, and what about any sort of media events or social media posts because one of the things that I noticed when I started doing the research... First I dug into social media accounts and I've seen, I've tried to look at sustainability reports by the company and also general media because we have access to that by university, and I was actually quite surprised that it was very sort of low key, very silent, which is kind of a strange thing because the original assumption is OK, you have a huge company and this is basically a slam dunk win thing for them. They just need to allocate a little bit of money and to use their logistics powers to support something that could have a very sort of wide effect among the public. But then, when I looked at it, I didn't see anything as a matter of fact, I've seen a very weird thing too.

Interviewer: Several local newspapers had a very short promotional pieces on the action, and apparently, they've talked to local and community pharmacists, but then they had the exact same lines… Like four of them in different parts of the UK, which basically means it's just like a PR stunt. And I was kind of surprised by that, to be honest.

Participant C: Yeah. Now when *GSK* ended complete the cycle. My understanding from speaking to them, which I don't think was ever written down, so it's kind of that verbal off, almost off the record potentially. But it wasn't commercially viable. So, I think the proportion of inhalers coming back for recycling were very small proportion like 0.1 of a percent or something that sort of order.

Participant C: So they weren't recycling much, and *GSK* were footing all the bill for it. So, it was just a loss leader and it was it done there as to promote *GSK*, a bit into "look how responsible we are". But I think commercially… The commercial decision overruled the positive PR spin ultimately.

Participant C: And that's what we're seeing with the recycling scheme that we're doing now as it is expensive. And I suspect a lot of that is because it's an expensive process to be able to extract the propellant gases, clean them, and do any of the recycling that you can do.

Interviewer: OK, OK. Yeah. It makes sense. OK, thank you.

Interviewer: I would like to move to the section where I want to talk a little bit more about the patients and how they've seen the project.

Interviewer: So when in the process of you asking them to return their used inhalers, did that take much of your, you know, is it something that takes much of time and energy from the pharmacist?

Participant C: I mean, it depends how much you do. I mean being in base in the hospital with our patients when they come into hospital as an acute admission or whether they're coming to clinic. And probably at both situations where I see those patients, it's very difficult to say, well, we can recycle your inhalers? We'll actually have not brought them with me. So it's that community setting I think would be the bigger one.

Interviewer: Yeah. OK.

Participant C: So we're just where we recycling the ones where patients have run out or we're changing their inhalers and they called me. Can get it out of your community. That would be the better message.

Participant C: What we were trying to do is send letters to patients from our respiratory clinic. So, like you've got an appointment at the chest clinic on this date… Did you know we can also recycle your inhalers? If you've got any empty inhalers, bring them. We put those into clinic letters as a standard text to try and promote that. And we've got posters on the ward. We've got them in the clinic in prominent positions to try and get people to think about that, because we do have a lot of patients who come back time and time again and hopefully, they'll keep bringing their inhalers.

Interviewer: As a sort of a habit…

Participant C: Yeah, I think, oh, wow, next time I'm here, my next appointment is in three months. Right, bring my inhalers.

Interviewer: OK.

Interviewer: I'm interested also in their reactions to it. So, I don't know how much of that you can assess, but like I was interested, was it something that they accepted enthusiastically or was it just OK, I'll do it or…?

Participant C: Yeah. I think that's changed in recent years. When the *NHS* was first really getting into, let's start putting people on lower carbon impact inhalers. We did some work and [INAUDIBLE] did some work actually, and the publisher as an abstract to the [INAUDIBLE] few years ago, and they're looking at what are the factors that are most important for patients when choosing which inhaler and the thing that most people are asking for was, is this inhaler going to make me feel better? Is it going to help me?

Participant C: And the environment was low down. On that. I think when *NICE* published a few years ago, a patient, what they call a patient decision aid to help people decide what inhalers they want to use.

Participant C: Which I don't really think certainly speaks as a patient decision aid. It was bit of a PR message, but it was quite a lengthy document. It was about 14 pages. The first document and I showed it to a few patients and a few of my patients like, well, I can't use that. It's too much to read and but then I had a younger chap who was probably in his early twenties. They'd be still at university, I think, and he was like, oh, this is really exciting. Let's. Yeah, I'm interested in this.

Interviewer: Mm hmm.

Participant C: But I do think in more recent years, over the last couple of years, people are thinking more about the environment. So, it's actually becoming a bit higher up, but ultimately patients want an inhaler that works for them.

Interviewer: OK. Yeah, it makes sense.

Interviewer: OK, I was also meaning to ask, did anybody maybe like write or came in to ask about the scheme? Before you advertised it?

Participant C: We, I mean they're certainly we have had a small number of patients asking whether we have recycling schemes can we recycle medicines. But that can be a relatively smaller number of people. It's not usually highest.

Participant C: In like in what people are asking is and that may be related to the setting I work in been in hospital in acute care. It may be an old community pharmacy over the last year or two, they've had a more of an incentive scheme to get patients to bring their used medicines and used medicines to the community pharmacy for safe disposal. And there's been a lot of posters going up into pharmacies for that. So I can imagine they may have had patients who ask "do these get recycled?" No, it's just getting incinerated. But I don't know that because I don't work in that setting.

Interviewer: Yeah. Yeah. OK. Thank you. Thanks. And to wrap up with this, so what was the response rate in the terms like how many, how much, how many of them actually brought the inhalers?

Participant C: Not many, not many. I mean, even with the mitigating scheme we're doing at the moment in clinic, we're running for about two months. And if I had 10-12 inhalers, probably no more than 20 have been collected in the clinic which is open five days a week.

Participant C: So it's not been the greatest response in the outpatient setting, but we've had a lot more from inpatients, which are people bringing inhales that they're not using, they've stopped them, or they've run out.

Interviewer: OK. OK. Thank you.

Interviewer: I also wanted to ask were there any other organisations that were involved in the project? I've found certain level of promotion where with the *Royal Pharmaceutical Society* and *National Pharmacy Association*, especially on the on the social media, but any sort of organisational help or logistical help and would anybody?

Participant C: Not with the 'Complete the Cycle', I mean *the Community Pharmacy England*, which were then known as *PSNC*, was it *Pharmaceutical Services Negotiating Committee*?

Interviewer: Hmm.

Participant C: And the *RPS* were promoting heavily the thing for community pharmacists couple of years ago about returning medicines to your pharmacist for safe disposal. But it's not, that's not a recycling scheme that is just safe disposal rather than putting medicines into landfill and that's environmentally that's better because you're not going to get the canisters getting damaged and releasing all the propellant that way you're not going to get the plastics leaks. You need to ground water. They are going to be incinerated in environmentally better way. It's still not recycling, but it at least it's a step towards that.

Interviewer: OK. Anything else that you would like to add or something to come?

Participant C: Yeah, I mean, I could tell you about the recycling scheme that we're doing at the moment. If that is interesting. So, we've got a grant from *Chiesi* for this project. So, we're working with the only company I know that does will recycle inhaler propellants, which is *Grundon*, which are based down near Oxford. So, we're just getting up the contract with them and they will take MDI's and they will extract the propellant gases and they'll get repurposed for air conditioning. They can't be recycled into medical devices, apparently. That's this legislation against that. The metal canisters are all compacted in form into like metal bricks. It then gets smelted and reused, and the plastic in MDI's believe it's all recycled and put into things. I think like rubber matting for playgrounds and things. I think on that one. But the dry powder inhalers, you can't recycle because it's not cost effective because there's too many different polymers and too many different parts to pour them apart.

Participant C: So they still get incinerated with energy capture, which is better than landfill, but it's not as good as recycling. So, we're just stepping that up and in the first two months I was just looking at the data last week. We've collected enough inhalers to save the with the CO_2 equivalent footprint of two tonnes of carbon dioxide equivalent saved in two months.

Interviewer: OK, cool. This new project sounds like it is way more structured in the terms of.

Participant C: Yeah.

Interviewer: This is what we're gonna do with the inhalers that we're gonna collect. And this is something that then can be actually advertised to the people. So, they would so they would be very sure of, OK, what I do if I make the effort, this will definitely have a kind of a positive impact. So, would you say that this is something that it was significantly different from 'Complete the Cycle'?

Participant C: It is, it is, and I think we've got more control over this.

Interviewer: Yeah.

Participant C: We're, but we're paying the cost for it, but we've got the project grant that support it. So, I think each time we get a collection of the inhalers it uses up about 1/10 of our budget. Almost. It's quite expensive. What I'm hoping to do is get the data on what we recycling, how much the, and I'm going to share that data with the hospitals across West Yorkshire.

Interviewer: Yeah.

Participant C: And with community pharmacy and say: look, if we can all collect inhalers for recycle even if we then centralised those in one site and then share the cost for recycling it becomes then cost effective because it's not exactly it's cheaper to get them recycled and I think that's one of the big barriers is that somebody has to pay for it somewhere, pharma don't want to pay for it, we've seen that with 'Complete the Cycle' and the *NHS* has no money for a single organisation to do it.

Interviewer: OK.

Participant C: But if multiple organisations can do it and share those costs, it's not as bad.

Interviewer: OK. That sounds, that sounds great actually.

Participant C: And we were, yeah. And we were taking the model. I don't know where you've seen it and the take care project. Anna Murphy and Leicester published on that.

Interviewer: OK.

Participant C: And they worked with Keith and *Grundon*, but they did a scheme. Where patients community pharmacies were given envelopes where they could then post their empty inhalers to *Grundon*.

Interviewer: OK. 'Take care' project right?

Participant C: So it's Anna Murphy is the first author and it was *NPJ Prim Care Respir Med* 2023 Jan 21;33(1):5.

Participant C: 2023.

Participant C: Volume 33.

Participant C: #5.

Interviewer: That's very specific. Yeah. OK. Thank you. Yeah, we'll check this out.

Interviewer: I have no further questions.

Interviewer: And thank you very much and. This was this was a huge help.

Participant C: Yeah, yeah.

Interviewer: I will send you the transcript as soon as I finish it, like in the next day or two so you can check and see. Like if you want to approve it or not. And I will keep you posted as soon as it's published, which I hope it will be. In soon. I will send you the link and I will send you the paper to have it.

Participant C: You're very welcome. Yep. Brilliant. Yes.

Interviewer: OK. Thank you very much. It was a pleasure and it was, it was a real help. Thank you.

Participant C: Yeah, you're very welcome. Good luck for the work.

Interviewer: OK. Thank you very much. Good luck with good luck with your project as well. They sound really important and it really sounds like you're on the right track. So this idea of creating some sort of a joint sort of action in order to reduce the cost and to find perhaps sponsors or something, that sounds like a really good idea.

Participant C: OK. Pleasure.

Interviewer: OK. Thank you. Thank you very much. Take care and have a great week.

Participant C: You too.

Interviewer: Bye.

11.5 Appendix 5 – Codes, dominant frames and emerging discourses in Study 2

<table>
<tr><th>First-order codes</th><th>Second-order codes (open) Sustainability frames</th><th>Third-order codes - Discourses (axial)</th></tr>
<tr><td rowspan="4">- Stakeholders - Business in General
- Stakeholders - Company
- Stakeholders - Employees
- Stakeholders - General Public
- Stakeholders - Global Governing Organizations
- Stakeholders - High-Profile Individuals
- Stakeholders - Investors and Shareholders
- Stakeholders - Media
- Stakeholders Medical Professionals
- Stakeholders - National Governments and Regulators
- Stakeholders - NGOs
- Stakeholders - Patients
- Stakeholders - Pharmaceutical Industry and Industry Organizations
- Stakeholders - Politics
- Stakeholders - Research and Academia
- Stakeholders - Think-tanks, Lobbyists and Pressure Groups
- Stakeholders - Top Management
- Article Evaluation -Negative
- Article Evaluation - Neutral
- Article Evaluation - Positive
- Stakeholder Interaction - Advocacy
- Stakeholder Interaction - Confrontation
- Stakeholder Interaction - Cooperation
- Stakeholder Interaction - Evaluation
- Stakeholder Interaction - Funding
- Stakeholder Interaction - Investment
- Stakeholder Interaction - Legal Action
- Stakeholder Interaction - Partnership
- Stakeholder Interaction - Pressure
- Stakeholder Interaction - Resource and Knowledge Sharing
- Stakeholder Interaction - Shaming
- Article Sustainability - Focused
- Article Sustainability - Peripheral
- Company Actions - Proactive
- Company Actions - Reactive
- Company Impact - Creating Problems
- Company Impact - Providing Solutions
- SDG No poverty
- SDG Reduced inequalities
- SDG Sustainable cities and communities
- SDG Responsible consumption and production</td>
<td>- Sustainability of companies’ environmental performance
- Sustainability of companies’ approach to waste management and pollution
- Sustainability of companies’ use of resources and manufacturing practices
- Sustainability of companies’ internal environmental policies and actions
- Sustainability of companies’ strategies and actions to improve their environmental record
- Sustainability of companies’ environmental impact on the communities
- Sustainability of companies’ and industry’s environmental reputation and ranking
- Sustainable cooperation for better environment</td>
<td>- Environmental concerns</td></tr>
<tr><td>- Sustainable research and development of new medicines
- Sustainable improvement of efficacy and safety of medicines
- Sustainable access to medicines by the patients
- Sustainable pricing of medicines
- Sustainable medicines’ distribution pathways (private healthcare, state-sponsored healthcare)
- Sustainable approach to adequate addressing future health needs</td>
<td>- Focus on core business</td></tr>
<tr><td>- Sustainable value creation
- Sustainable investment, return and profits
- Sustainable business models
- Long-term sustainability (stability and predictability)
- Sustainable employment and jobs creation
- Sustainable tax revenues for the society
- Sustainable contribution to overall national stability and growth
- Sustainability of providing the socially valuable product
- Sustainable approach to saving and improving lives, curing disease, alleviating pain
- Sustainable support to science and knowledge development
- Sustainable investment in R&D
- Sustainable strategic industry for UK
- Sustainable generation and utilization of political capital
- Sustainable relationship with the government</td>
<td>- Socioeconomic and political significance</td></tr>
<tr><td>- Sustainable relationships with universities and research institutions on joint research projects, funding and investment</td>
<td>- Communication and cooperation</td></tr>
</table>

11.6 Appendix 6 – An example of the coding process in Study 2

Newspaper article paragraph:

"Cooperation with *Save the Children*, *GlaxoSmithKline* will pay for the training of more healthcare workers who will dispense medicines and give vaccinations… "Many years ago I used to campaign against *GlaxoSmithKline* and press them to lower AIDS drugs prices, and we gave them quite a hard time, but *GlaxoSmithKline* has changed enormously and under Andrew's leadership is leading not just the pharmaceutical sector but actually the private sector in terms of setting a standard for how a company moves beyond just corporate responsibility and philanthropy to how its core business can be transformative in terms of children." (The Guardian, 2013)

First-order codes:

Stakeholders – Company; Stakeholders Medical Professionals; Stakeholders – NGO's; Stakeholders – Patients; Stakeholders – Pharmaceutical Industry and Industry Organizations; Stakeholders – Top Management; Stakeholders – Business in General; Article Evaluation – Positive; Stakeholder Interaction – Advocacy; Stakeholder Interaction – Confrontation; Stakeholder Interaction – Cooperation; Stakeholder Interaction – Funding; Stakeholder Interaction – Partnership; Stakeholder Interaction – Resource and Knowledge Sharing; Article Sustainability – Focused; Company Actions – Proactive; Company Impact – Providing Solutions; SDG – No poverty; SDG – Reduced inequalities; SDG – Partnerships; SDG – Good health and well-being;

Second-order codes – Sustainability frames:

Sustainable access to medicines by the patients; Sustainable approach to saving and improving lives, curing disease, alleviating pain; Sustainable relationships with NGO's over different initiatives, projects and problems; Personal engagement of executives in sustainability projects, policies and strategies; Personal sustainability legacy on both corporate and societal level.

Discourses:

1. Socioeconomic and political significance

2. Communication and cooperation

3. Corporate leadership

4. Focus on core business