

An examination into the effects of the COVID-19 pandemic on diversity and inclusion initiatives
in the Irish pharmaceutical sector.

By

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An examination into the effects of the COVID-19 pandemic on diversity and inclusion initiatives in the Irish pharmaceutical sector.

Abstract

This quantitative study focuses on the diversity and inclusion initiatives of employees in the Irish pharmaceutical sector in a post-pandemic environment. Using a 40-item questionnaire and secondary data from published surveys, this study determined that COVID-19 had a positive effect on diversity and inclusion practices to increase employees' perceptions of inclusivity in the workplace. The "new normal" has changed how organisations can effectively attract and retain diverse talent. While flexible working models increased in popularity, there is a gap in research on their effect on D&I practices. Communication, employee well-being, performance, and innovation are key factors to consider with virtual working and inclusivity.

The main objective of this research is to assess the link between the perceptions of employees in terms of their organisation's inclusivity, how D&I initiatives were influenced by the changing environment, and how inclusive leadership can mediate both factors. This study will highlight the benefits of effective communication to support diversity and inclusion practices and suggest approaches to combat the changing environment for sustainability.

This study used a range of parametric and nonparametric tests to find correlations between the perceptions of D&I, current D&I practices and inclusive leadership. There was a significant positive correlation between how employees perceive their organisation's inclusivity and the availability of D&I initiatives. An argument on how important it is for leadership to promote inclusion and effective communication will be discussed. Moreover, research will be undertaken to determine if an inclusive leader promotes diversity in the workplace. These topics are the primary focus of this study because of a gap in current research on whether the crisis has affected minority populations and their ability to feel included in their organisations.

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List of Abbreviations

HR – Human Resources

HRM – Human Resource Management

D&I – Diversity and Inclusion

Pharma – Pharmaceutical

COVID-19 – the COVID-19 pandemic

COVID – the COVID-19 pandemic

24/7/365 – 24 hours a day, 7 days a week, 365 days a year

L&D – Learning and Development

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Chapter 1: Introduction

At the start of the COVID-19 pandemic, Human Resource (HR) departments were impacted by a changing environment that affected diversity and inclusion (D&I) initiatives. Irish pharmaceutical (Pharma) organisations saw the change from a physical office environment to the need for remote working because of health and safety measures. Thus, many employees in the workplace were affected by this disruption. Leroy, Schmidt, and Madjar (2021) examined how remote working negatively affected families and women in the workplace with increased work distractions and expectations to juggle home life with work expectations. This study agrees with Bierema (2020) that in a chaotic environment, organisations should be focusing to support marginalized groups with proactive D&I initiatives to mitigate threats to their well-being. This chaotic environment highlighted the need for creative initiatives to retain and attract talent in Ireland with inclusion initiatives that promote a supportive culture. This study will look at whether the Irish pharma sector including pharmaceutical, biopharma, pharma manufacturing, and biotech organisations are using effective D&I practices to combat inequalities in the post-pandemic environment.

1.1 Scope

Particularly in the pharmaceutical sector, D&I is a rising topic due to the view that diverse talent provides organisations with innovative strategic advantages. Morley (2018), in a pre-pandemic article, suggested that effective D&I practices have tangible benefits to the business in terms of tapping into the rising diverse workforce. Although, this approach takes time and a certain level of commitment to achieve D&I goals. Roberson (2020) focuses on whether organisations look at the fairness of their existing policies and practices before reaching a diverse target or inclusion initiative. This study agrees with the argument that organisations have to change from within to have effective D&I practices. However, it is unclear whether organisations can balance the advantages an effective D&I strategy can bring versus the impact on resources and time for HR departments already racing to firefight issues and establish pandemic policies. This study will focus on the employees of the Irish pharmaceutical sector and their perceptions of their employer's values toward diversity and inclusion.

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1.2 Research Question

This study will highlight the push and pull factors that determined what new HR initiatives pharmaceutical organisations implemented during the pandemic and in a post-pandemic environment. This proposal aims to answer the research question, ‘What are the effects of the COVID-19 pandemic on diversity and inclusion initiatives in the Irish pharmaceutical sector?’, since it is yet unknown whether the pandemic has negatively or positively impacted diversity and inclusion within pharmaceutical companies. It is also not known if employees are aware of D&I initiatives implemented by their organisations and the impact this has on their perceptions of inclusivity. This gap is a key area of focus for this study.

In conjunction with an analysis of the secondary data from EY Ireland (2019) and CIPD (2021a) surveys, this study will use quantitative data through an online questionnaire to examine the post-pandemic results of D&I initiatives. Though this study will use a smaller respondent sample, the impact of COVID-19 on the D&I initiatives should be apparent. Through the questionnaire, this study will ask employees of Irish pharmaceutical organisations to provide insight into their perceptions of their organisation’s D&I initiatives, collect data on their current D&I practices, and rate their line managers to determine if they show inclusive leadership skills. This study will define the level of commitment Irish pharma organisations have with D&I to attract and retain talent whilst in a post-pandemic environment.

1.3 Structure

The overall structure of the study takes the form of six chapters. A review of the current literature on diversity and inclusion, perceptions of employees, disadvantages in the workplace, flexible working arrangements, and inclusive leadership during the pandemic is disclosed in the literature review. The research method and results of the research instrument are outlined in chapters 3 and 4. An in-depth discussion of the findings of this study can be found in chapter 5. Finally, the conclusion, recommendations, implications of findings, and personal statement are presented in chapters 6 and 7. References and Appendixes are listed on the last pages of this study.

Chapter 1 – An introduction to the main themes is discussed along with an understanding of the scope of the study, research question, and overall structure of the paper.

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Chapter 2 – This chapter will focus on a literature review of diversity and inclusion practices, the impact of remote working on a diverse workforce, and inclusive leadership. This section will highlight the background of diversity and inclusion in the workplace during and after the COVID-19 pandemic.

Chapter 3 – This chapter of the study will focus on the methodology of the research topic. The research method, demographics, structure, pilot test, and questionnaire analysis are included in this chapter. Ethical considerations and limitations are also discussed.

Chapter 4 – The findings of the research are observed in this chapter. Firstly, descriptive statistics of the three main topics including the perceptions of D&I, D&I practices, and inclusive leadership will be analysed. Then, the study will attempt to answer the 3 outlined hypotheses from the literature review. A conclusion is included to examine the results of the analysis and answer the research question.

Chapter 5 – Discussions of the key findings of the research will be presented in this chapter. The main results including a positive impact on inclusivity, need for communication, and commitment from line management are supported by previous research from chapter 2.

Chapter 6 – The final observations and summaries are included in this chapter. Recommendations and implications of findings are discussed with examples of costs and implementation.

Chapter 7 – This chapter includes a personal statement as requested by CIPD to summarise this researcher's experience with conducting a master's dissertation.

Chapter 2: Literature Review

In this chapter, there will be 6 main sections about diversity and inclusion during the COVID-19 pandemic. In the first two sections, this study will define and debate what diversity and inclusion involve in Irish pharma organisations. Establishing the research around diversity and inclusion in the workplace allows this study to give insight into the research findings in chapter 4. Practical examples are given in sections 2.2, 2.3, and 2.4 in terms of pre-pandemic literature and post-pandemic examinations. Section 2.2 discusses what the current perceptions of

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D&I initiatives are in Irish pharma organisations. This includes a link to how the employees view diversity within their organisation. This will raise the question of whether communicating initiatives is as equally as important as implementing practices. Diversity and inclusion during COVID-19 discussed in section 2.3 will highlight the critical role supporting initiatives is to combat a changing environment. Sub-sections 2.3.1 and 2.3.2 will outline the advantages and disadvantages of new D&I practices. In section 2.4, this study will define and examine inclusive leadership during the pandemic. Exploration into how line management can influence inclusivity will be discussed. Three hypotheses will be raised from the literature and tested in Chapter 4. Together, this research should provide a significant overview of the current literature.

2.1 The Pharmaceutical sector and D&I in Ireland

The Irish pharmaceutical sector hosts the majority of the top 20 “big pharma” companies with a range of 300 organisations which in part sustained the Irish economy during the pandemic (Polyak, 2022). The organisational structure for pharmaceutical companies can range from office workers to employees on 24/7/365 shift rosters. This is apparent in research and development, quality and operational departments where a portion of employees would work hours outside the normal 9-5 workday. In summary, the Irish pharma sector is unique in the range of positions available along with hard-to-fill shift workers (Fiorenza, 2022). Because of globalisation, the amount of talent available to pharma organisations in Ireland has diversified. Barbosa and Cabral-Cardoso (2010) argue that globalisation is a contributing factor to evolving diversity and inclusion practices with influences from the United States and EU. Ireland has a unique view on globalisation where the majority support equality and an increase in immigrants (Loscher, 2021). Because of the influx of different people from around the world and the introduction of flexible working arrangements, attracting this type of talent would be beneficial to the sector in the long term. However, while the COVID-19 pandemic escalated this process and opened the door to opportunities, it negatively affected the employee’s well-being and increased turnover rates around the world (d’Aniello, 2022). Organisations struggling to retain their talent have to look internally to support their employees during a crisis and attract new, diverse talent for sustainability. It raises the question of whether Irish pharmaceutical organisations are properly investing in diversity as a resource to combat the changing environment due to COVID-19.

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The term ‘diversity’ will be used in this study to describe employee differences including, age, disability, gender, race, religion and belief, and sexual orientation, whether they are visual or non-visual factors (CIPDb, 2021). Diversity should be supported in the workplace with policies to provide a safe work environment. Employers need to be aware that many of these factors are protected by the nine grounds of discrimination in the Equal Status Acts 2000-2018 (IHREC, 2018). Thus, diversity management is key to creating a diverse workforce without legal implications (Köllén, 2021). However, besides the legal requirements, the Irish pharma sector should develop its diversity practices after the effect of COVID-19 on the workplace environment. This can be seen with government recommendations to invest in diversity, inclusion, and gender equality (Department of Public Expenditure and Reform, 2020) and with Irish laws in gender pay gap reporting (CIPD, 2022, Department of Children, Equality, Disability, Integration and Youth, 2022). Best practice initiatives give Irish pharmaceutical organisations the push to invest in diversity management. HR practices need to look at the underlying issues associated with diversity to create initiatives that address inequality, discrimination, harassment and bullying in the workplace.

It is equally important to define the term inclusion while discussing diversity. The term inclusion is used in organisations to refer to providing equal access and support to employees regardless of any differences. Similarly, Chung, Dean and Ehrhart (2020) describe inclusiveness as embracing differences and valuing uniqueness. This study perceives that there are many factors to facilitating inclusion for all employees. Jaiswa and Dyaram (2019) define inclusion as a mediating factor to diversity in the workplace that resolves diversity issues and affects positively employee wellbeing. Studies of inclusion show the importance of combining diverse objectives with inclusive work practices to increase the effectiveness of D&I initiatives (Chen and Tang, 2018). However, there can be a political divide among some employees, and it is important to discuss employee wellbeing as a conscious issue in the workplace. Mediating differences is equally as important as increasing diversity in the Irish pharma sector to promote employee wellbeing. Roberson (2020) describes the organisation’s responsibilities to inclusion and wellbeing through an effective anti-bullying and discrimination policy.

As outlined earlier, the literature on diversity management suggests it has an increased effect on sustainability in organisations. However, this study believes that creating an inclusive

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culture is more central to organisational goals. As a result of the pandemic, the great resignation phenomenon saw the rise of employees stating that effective D&I practices were an attractive quality in an organisation (Lewis *et al.*, 2022) But, during the pandemic, organisations were under financial strains and for many HR teams, budget cuts and overworking affected the interest of undertaking new D&I initiatives (Faragher, 2020). This study believes that this harmed employee wellbeing and organisational commitment to increase employee turnover. An inclusive culture would help diverse employees to feel valued by their organisation. Dixon-Fyle *et al.* (2020) also promote this theory and believe that though hiring diverse talent is a good start, supporting them in the workplace is key to an inclusive organisation. In the Irish pharma sector, there may be high levels of diversity but this study questions if those employees are included in work decision-making and workplace activities. Bolger (2020) gives a great example of inclusion below.

“Diversity is being asked to the party. Inclusion is being asked to dance.”

Savin and Cosma (2020) argue that though organisations could be reluctant to invest in an inclusive culture because of opposing forces, there is an overall positive outcome from a competitive advantage. People from different backgrounds bring various new perspectives and new technics to their workplace once they feel valued. Therefore, an investment in an organisational culture that supports inclusion would be crucial in a post-pandemic environment. Collectively, these studies outline a critical role for HR practices to develop in support of an inclusive post-pandemic environment.

2.2 Perceptions of Diversity and Inclusion

In the new global market, D&I has become a central issue for pharmaceutical organisations in Ireland due to the lack of available talent. Increasing diversity and promoting inclusion has long been a subject of great interest in HR practices. During the pandemic, some organisations in Ireland focused on their employer brand as an effective tool to attract and retain talent (Kucherov *et al.*, 2022). This theory could also be applied to communicating D&I practices in the Pharma sector. There are several unique resources pharma organisations in Ireland could use to promote D&I including becoming an investor in diversity, a “great place to work”, or a member of a professional organisation supporting diverse groups (Irish Centre for Diversity, 2022, Great Place to Work, 2022, Murray, 2021) Jonsen, *et al.* (2021) supports this theory and concludes that employer branding of D&I helps the organisation attract and retain talent that values inclusivity. However,

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this article overlooks the fact that inclusivity should be built internally as well to maintain this image. An active social media presence does not equate to an effective employer brand due to the accessibility of employer rating websites (Robertson, J. *et al.*, 2019). This raises the question of whether employees see organisations that communicate D&I objectives as fulfilling their promise with effective D&I policies and practices.

A greater advantage would be to research how HR can improve the perceptions of D&I in the workplace. This study suggests that the goal of the organisation is to have an inclusive culture and the employee perceptions of D&I are a way to measure this. However, the employee awareness of D&I practices in the workplace might be different to the HR initiatives in place. This study questions whether companies that communicate their D&I initiatives will have a higher level of employees that believe their organisation is inclusive. Pellicchia (2019) suggests that investing in corporate communications to spread the word on current D&I practices in the organisation allows employees to have a voice and input into their workplace culture. This sense of belonging in organisations can increase productivity and employee well-being which is an important factor to consider because of the current COVID-19 environment. Norman and Johnson (2022) believe that an employee's sense of belonging and inclusion is usually influenced by having like-minded co-workers. This view is supported by Isotalus and Kakkuri-Knuuttila (2018) who argue that intercultural communication is crucial between employees as well as initiatives because it is important to learn about different beliefs and cultures in the workplace. Opening the rhetoric for a focus on challenging biases in the workplace allows a cultural reset in the organisation to one of respect and inclusiveness.

Studies have discovered evidence that combining the internal and external communications on D&I practices may affect the perceptions of an inclusive organisation. However, this study needs to research how to successfully communicate an inclusive agenda in the Irish pharma sector. In CIPD's (2021a) HR practices in Ireland survey, one of the top priorities for HR teams was to champion diversity to retain talent with 63% of respondents reporting that their practices promote an inclusive culture through flexible working and recruitment strategies. A broader perspective has been adopted putting inclusion first and diversity second to achieve retention and well-being amongst a diverse workforce. However, this study believes this practice would work for a short period if there were no initiatives to find the current issues with D&I in the organisation.

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Though adding diversity and inclusion to the organisation's mission or value statement is a good illustration of promoting D&I, this study believes that HR teams should be reporting their current D&I effectiveness. This is also evident in EY Ireland's (2019) D&I survey report with a major challenge listed as not collecting or analysing D&I in the organisation. Yet, many organisations do not report on their diversity or employment statistics. Williams and Dolka (2022) highlight that some organisations are reluctant to report their diversity or gender gap reports because of the backlash the organisation would get from the community. This study suggests that not reporting is accepting the level of inequality already in the organisation and this is reflected in the perceptions of employees of the organisation's D&I practices. Overall, the perceptions of D&I initiatives are important to analyse in the Irish pharmaceutical sector to bridge the gap between D&I initiatives and effective practices that create an inclusive culture. A more detailed account of the different types of D&I practices during the pandemic is given in the following section.

Hypothesis 1: The COVID-19 pandemic increased the need for Irish pharmaceutical companies to communicate their D&I initiatives to their employees.

2.3 D&I practices during COVID-19

One purpose of this study was to assess the extent to which the COVID-19 pandemic affected D&I practices in HR teams. Jankelová, Joniaková and Procházková (2022) describe that before the pandemic 14% of organisations had prioritised D&I practices and when the pandemic hit, there was a decrease of 5%. This study believes that HR teams had to focus on firefighting problems during COVID-19 instead of strategic planning. Much of the research around D&I centres on how initiatives are increasing diversity and inclusion rates during the pandemic. This raises the question of whether pharma employees feel like they have been negatively or positively impacted by COVID-19.

As an example, in a global McKinsey study, surveys indicate that diverse workers find the recent struggles in mental health, job retention, and communication from remote working as long-term issues of D&I (Ellingrud *et al*, 2020). Another issue identified by Cumberland, Deckard and Ellinger (2021) illustrated that employers have been hiring diverse talent during COVID without the support of inclusive practices such as diversity education. Together, these studies indicate that more work needs to be done to ensure that organisations are supporting and educating their diverse workers sustainably through extraordinary times. This study suggests that effective diversity

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education should be evaluated for effectiveness. Gino and Coffman (2021) point out that certain diversity strategies like unconscious bias training needs to be supported with commitment from organisations to communicate their findings and report on diversity in the workplace. This study also questions how organisations know that their employees are not biased after the training if it is not measured. This view is supported by Ramlachan and Beharry (2021) who determine that employees have been greatly affected by the pandemic and leaders with the support of HR functions need to effectively communicate with a diverse workforce to retain them. This could include adding diversity education and training to the current D&I practices. However, this study questions how the Irish pharmaceutical sector especially smaller organisations can invest in D&I effectively without the funds to do so.

The results of the pandemic that negatively affected a portion of the population in Ireland highlighted problems with pre-pandemic D&I. This cultured a rise to more inclusive practices to combat the effects of COVID. Similarly, Richmond (2021) highlights that, due to remote working, organisations may have increased diversity in the workplace, however, it is important to also support this change internally with an inclusive culture for sustainability. This report believes that the pandemic has raised awareness of the fact that it is been increasingly harder to attract and retain diverse talent.

2.3.1 Disadvantages in the workplace from COVID-19

Another issue to consider is that some diverse candidates may be at a disadvantage in finding positions during COVID-19. Liard-Muriente (2005) discusses how the job market has become discriminatory to certain marginalized groups because globalisation has increased the availability of people with higher levels of education and experience. This study proposes that though globalisation may have created a larger inequality in opportunities, it opens HR to support diverse talent by creating initiatives that mitigate this factor. Thus, it would be important to see the number of Irish pharma organisations that invest in diverse talent with unbiased recruitment strategies and mentorship programmes.

This study believes it is important that organisations give opportunities to disadvantaged communities because they need support to gain education and job experience. Corrington *et al.* (2020) expand this view and suggests that employees have different struggles and can be discriminated against if HR policies are not put in place. An example of this during the

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pandemic was that women were disproportionately affected with a negative impact on productivity and job satisfaction (Feng and Savani, 2020). This study evaluates that working mothers have been challenged to provide childcare whilst working remotely. Similarly, Cohen (2021) reported that because the pandemic created childcare issues that directly affected women, it is the responsibility of an organisation to identify gender bias and develop an appropriate plan to address it. This view is supported by Ammerman and Groysber (2021) who writes that employers systematically change D&I practices to attract and retain key female talent. Reichwald (2021) suggested that whilst the pandemic created struggles disproportionately amongst minority groups, it had a positive impact on inclusion and diversity initiatives. Minority groups defined in this study are marginalized populations based on their culture, race, ethnicity, gender identity, socioeconomic status, or practices. This theory proposes that the pandemic has opened the doors to positively impact the creation of better HR practices in line with attracting diverse candidates. Flexible working models have become increasingly popular to help bridge the gender gap with employees reporting that they can work flexible hours or work from home in EY Ireland's (2019) D&I survey. This study questions whether organisations in the Irish pharma sector have implemented these changes to support inclusion through their D&I practices in more recent times.

2.3.2 Flexible working

One of the more obvious effects of COVID-19 on D&I practices is the increase in diversity from remote working. There is a large volume of published studies before the pandemic describing the role of virtual working. Derven (2016) hypothesised that the adoption of global teams would add innovation and increase diversity in gender, culture, identities, education, and socio-economic backgrounds. This study researched compelling data at the time which is tested in today's unprecedented societal changes. Derven's original argument supports Hung *et al*'s (2021) research during the pandemic that flexible working benefits inclusivity towards employee differences. Flexible working is defined as a working arrangement that gives employees personalised options of working whether it be remote, hybrid working models, job sharing, part-time work, flexible hours, or modified working weeks. Having the availability to work in a more flexible environment has given new opportunities to employees or candidates that could not work in a normal workplace. Kraft, Jeske, and Bayerlein (2019) highlight that the current flexible working arrangements have opened the door to more inclusive hiring, especially for people with disabilities, and recommend

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virtual internships as a way of breaking down barriers. However, this proposal suggests that these studies have not considered the negative impact of a global pandemic on the inequalities and differences minority groups may have experienced with remote working. In contrast to earlier findings, Mallett, Marks, and Skountridaki (2020) debate that remote working is not as feasible for people of different socio-economic backgrounds and can be exploitive to minority populations. This proposal agrees with Mallett *et al*'s argument and highlights that certain groups would not have access to convert their living spaces to promote a productive working environment. Initiatives that organisations can implement to combat the negative effects of remote working to diverse populations can be to provide equipment to work from home (Stanca and Tarbujaru, 2021).

Itano-Boase *et al* (2021) recommend innovating HR practices by introducing support to work virtually, breaking down stigmas, and addressing gaps in current programmes to make the work environment accessible to people with disabilities. Though diversity rates in pharmaceutical organisations may increase due to remote working, a significant insight is needed on supporting these changes with inclusive HR initiatives. New technology and more freedom from remote working are empowering to certain workers but suggestions for a more personalised flexible working model would benefit larger populations (Stone, 2021). Remote working during the COVID-19 pandemic saw clusters of certain teams from similar backgrounds form virtual groups that prevented integration with other team members. Edwards (2020) argues for HR D&I initiatives to build an inclusive culture that helps prevent remote working silos attributed to diverse teams. The research presented in this section suggests that flexible working may increase inclusion in the virtual workplace. However, pharmaceutical organisations in Ireland need to adopt supportive initiatives to facilitate a flexible working environment that promotes inclusion.

Hypothesis 2: Flexible working arrangements promote an inclusive culture.

2.4 Inclusive leadership during the pandemic

Though effective D&I policies are needed to combat the changing demographics during the COVID-19 pandemic, several studies highlight the importance of leadership as the answer to an inclusive organisational culture. Leadership during the COVID-19 crisis is a balance of conflicting priorities that need to adjust to the changing environment while maintaining supportive relationships with employees (Ramlachan and Beharry, 2021). Similarly, McClain and Linde (2021) highlight the importance of leadership support on sustainability in a virtual

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workplace but signify inclusiveness as the key to promoting D&I. Roberson and Perry (2022) states that inclusive leadership is focused on fostering an inclusive environment where everyone regardless of differences is valued. This proposal defines inclusive leadership as a style of leadership that encourages open communication and dialogue with employees that promotes inclusiveness and a sense of belonging (Kuknor and Bhattacharya, 2021). These studies indicate that there is a relationship between an inclusive leadership approach to D&I and a positive impact on the organisation in terms of performance and innovation. As noted by Jin, Lee, J. and Lee, M. (2017) if leaders want to be more inclusive, they must continue to be unbiased, encourage their employees to participate, and value their contributions. Concurrently, this suggests that inclusive leadership is an effective way to support employees to communicate on issues. EY Ireland's D&I survey (2019) proposed that providing inclusive leadership training to managers will promote accountability for inclusive actions.

However, the main weakness of this argument is the failure to address how different organisations are affected during a crisis. This proposal questions whether a certain type of leadership is most effective in implementing D&I initiatives in the pharmaceutical sector. Smith and Butler (2020) concluded that in uncertain times ambidextrous leadership can be effective by balancing the transactional relationship with employees and explorative approach to supporting innovation. This viewpoint focuses on maintaining equality by adopting a hybrid approach to the changing environment. A much-debated question with Smith and Butler in their evaluation is whether a certain type of ambidextrous leadership positively influences diversity. However, the issues with this argument can be addressed by discussing diversity-oriented leadership. Lee *et al* (2020) suggest the use of diversity-oriented leadership over inclusive leadership because it promotes the use of knowledge-sharing behaviour to encourage diverse workers to collaborate on new ideas. Though Lee *et al* attributes internal communication as the key to diversity-oriented leadership, it is unclear whether this effect is also relevant in inclusive leadership. A further investigation is needed to distinguish the most effective style of leadership that complements D&I initiatives during COVID-19. This study suggests researching the effect of inclusive leadership as the link to collaborating with a diverse workforce in pharmaceutical organisations. This study suggests that inclusivity in line management can be a positive influence on employees developing HR D&I initiatives.

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Hypothesis 3: D&I initiatives are more effective in tandem with inclusive leadership.

2.5 Conclusion and research question

Through the literature review, this study has discussed the effects that the COVID-19 pandemic had on the Irish Pharmaceutical sector's D&I initiatives and employees' opinions on their organisation's inclusivity. Thus, analysing the current environment with a qualitative research method would highlight the changes this sector has seen in a post-pandemic setting. To answer the research question, 'What are the effects of the COVID-19 pandemic on diversity and inclusion initiatives in the Irish pharmaceutical sector?', this study has outlined the proposed results of employees' views on D&I in their organisations. Thus far several studies have revealed a correlation between globalisation and the need to attract and retain diverse talent. However, it is not yet clear if the pandemic increased the need for organisations to communicate their initiatives to employees due to changes in the workplace. There is an identifiable gap in research into whether the effect of the pandemic has positively or negatively affected D&I initiatives and the effect they have on perceived D&I in Irish pharma organisations. This study suggests that organisations should focus on moving the agenda forward, addressing any gaps in their policies and practices, and developing inclusion practices. It is also important to specify certain groups or practices that were affected by COVID-19 and look for ways to support them on the workplace. An argument could be made on whether the Irish pharma sector has focused on the current gender gap and the perception women have of their D&I practices as discussed in Section 2.2. Similarly, this study raises the question of inclusive leadership and its correlation to effective initiatives. Since there is a lack of research in this area, this research is an up-and-coming section of D&I studies. There is a gap in how data should be collected to test these theories. In the next chapter, this study will describe the research method most appropriate for undertaking this examination into D&I initiatives.

Chapter 3: Methodology

Since the virtual working revolution, there is a gap in research on the effect of the pandemic on D&I initiatives in pharmaceutical organisations in Ireland. In this chapter, the methodology of this study will be discussed along with the proposed research approach to collect data on D&I. This study has chosen to conduct quantitative research using primary data from a questionnaire directed toward Irish pharmaceutical employees and well as using secondary data

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from research taken from employer publications to attempt to test the hypotheses and themes of the literature review. In the next section, the reason behind choosing this research method will be discussed. Section 3.1.1, 3.1.2 and 3.1.3 will discuss the primary and secondary data and the research instrument used. The questionnaire structure and analysis will be discussed in section 3.2, details on the pilot test in section 3.2.1, and analysis of the finalised questionnaire in 3.2.2. The limitations to the finished questionnaire are examined in section 3.4. In section 3.5, ethical considerations will be highlighted. A final overview of the methodology is listed in section 3.6.

3.1 Research Method and Demographic

As far as collecting data is concerned, two strains of research methods, qualitative and quantitative, are most used (Barnham, 2015). This study questions what research method would benefit the study in terms of the subject matter. Redondo, Fabra, and Martin (2020) targeted popular human resource management journals and discovered that most had favoured studies that used quantitative methods. Several larger organisations and public bodies also focused their research on D&I initiatives in Ireland by using quantitative methods. Annual reports are the main source of data on how organisations are reporting their initiatives (Microsoft, 2021, Central Bank of Ireland, 2021). This method allows this study to quantify results and prove a correlation between factors efficiently. Therefore, using the quantitative method of collecting data would be a descriptive way to conduct research into the effects of COVID-19 on D&I in Ireland.

3.1.1 Primary Data

This study will collect primary data to attempt to answer the proposed research question. Primary data is useful for studies that want to discover new research into the area of their choosing. Boaduo (2011) suggests that primary data is a way to collect original results from a focus group that requires preparing a research instrument to get information. A questionnaire or interviews are the most common way researchers can reach out to sample populations. This study chose the Irish pharmaceutical sector as the focus group for this research because it is underrepresented in demographic studies with only 1.5% of respondents in the sector for EY Ireland's (2019) D&I survey. Yet, the pharmaceutical sector has many organisations and a population of employees in Ireland as described in chapter 2. Additionally, the selected sample group is within the sector where this study has specific contacts. Therefore, there is a higher expected availability to the population to ensure responses. Working within the pharma sector allows this study to tap into

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the different organisations namely biopharma, pharma manufacturing, biotech, and pharmaceutical organisations. All these organisations will be the focus of selecting appropriate participants for this quantitative research.

3.1.2 Secondary Data

Secondary data will also be used to give a scale to the effects of COVID-19 in Ireland from surveys taken before and during the pandemic. This secondary data will paint a larger picture of how organisations reacted to a changing environment. Secondary data is usually used to support research topics. However, this study will use a mixed method of primary and secondary data that Lawrence (2020) suggests gaining more insight into a topic of research. An outline of the CIPD's (2021a) D&I survey with reporting on the different D&I initiatives from an HR perspective would be beneficial in this study to discover the scope of organisations that continued to work on their initiatives during the pandemic. Their published study on HR practices during 2021 in Ireland highlighted the transformative effect of COVID on the D&I agenda. This framework may give an interesting insight into how different organisations were affected by the pandemic and highlight the adaptation of D&I practices. In addition, the employer publication EY Ireland (2019), conducted an employee sample survey within Ireland on the state of D&I in Ireland before the pandemic. This research will be used to show the changing effects of COVID-19 on Irish practices from an employee perspective in more recent times.

3.1.3 Research instrument

A major advantage of conducting research through a quantitative method is that an online questionnaire can be used as the research instrument. Considering the changes due to COVID-19, the study will use random sampling through an online questionnaire sent to a large scale of pharmaceutical employees in Ireland. The benefit of this approach is that a larger amount of data is collected to back the themes and proposed effects of COVID on the current environment through virtual platforms. Based on the research question, a measurable source of data from the quantitative method will be easier to distinguish trends and can be tested in future studies. This questionnaire was sent to an equal amount of 210 employees from 30 Pharmaceutical organisations based in Ireland. The respondents were selected from a range of different experience levels and departments across the pharma sector. The participants in this study were recruited from multiple social media

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platforms, through email and sent to close contacts of this study. This study sent the same information request, listed in Appendix A, for all the sample populations regardless of platform.

3.2 Questionnaire structure and analysis

The methodological approach taken with this questionnaire is constructed with examples from previous studies and uses peer-reviewed questionnaires. Using Otaye-Ebede's (2018) employees' perception of diversity management practices scale, this study will attempt to collect data on the perceived D&I initiatives in the pharma sector. This scale is used 9-items to measure how employees view D&I in their organisations. This evaluation from previously used questionnaires is needed to determine the reliability and validity of this study's responses. To collect data on the different types of D&I initiatives during COVID-19, this study will use Konrad, Yang, and Maurer's (2016) diversity and equality management systems survey with 32 items built to examine 6 types of D&I practices. Although this model collected important data, this study questions the length of the survey and will adapt the items to better fit the population scale. A similar type of established questionnaire is used by Carmeli (2010) to measure 3 themes about inclusive leaders. This 9-item questionnaire is effective at assessing the research question but is not at the extensive length of Konrad *et al* (2016)'s model. Both Otaye-Ebede and Carmeli's questionnaires rated responses on a 5-point Likert scale ranging from responses "not at all" to "to a very large extent" while Komrad *et al*'s survey was based on a yes/no scale. All questionnaires used had Cronbach's alpha coefficients ranging from .86 to .93. The combination of selected established questionnaires suggests that a pilot test is needed to see how the full survey would work in practice.

3.2.1 Pilot test

The proposed questionnaire was sent as a pilot test to a sample population of the Irish pharmaceutical sector with 11 respondents out of 12 randomly selected employees. Because of the concerns listed in section 3.2, this study will use a pilot test which is proven to determine whether the questionnaire is user-friendly, effective at collecting the data needed, and flows correctly (Rowley, 2014). It is also important to test the reliability of the combined surveys.

The themes that emerged from the pilot test were correlated to the themes of the literature review and the overall thesis of this study. However, there was a misunderstanding with some questions in terms of getting the correct responses from the data set. For example, when the

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question, “Out of the options below, what new diversity and inclusion initiatives has your organisation introduced during and after the COVID-19 pandemic?”, was put into action, the respondents listed all initiatives at the current date. Though not wrong for their assessment, this study would collect the correct data if this question was omitted or revised to show the difference between pre-pandemic initiatives and the post-pandemic environment. To ensure a conclusive result on the themes, the questionnaire was revised to omit certain questions and add options that are in line with current knowledge of initiatives organisations have currently developed. The nationality item in the demographical section was deemed irrelevant for this study as it is not an ethnic or nationality-based questionnaire. The nationality question would have focused highly on ethnic or nationality bias instead of a broader view of the effects of Covid on employees. Though that does not mean that it is not a part of this study in terms of reoccurring themes in research and case studies. Instead, the quantitative data should show the overall viewpoints on diversity with correlating terms and differentiation between organisation size, age groups, and identified genders.

The second change was to the Otaye-Ebede’s (2018) employees’ perception of diversity management practices scale. The pilot test highlighted that several questions were duplicated between the 3 different questionnaire sections. To have a more user-friendly questionnaire, this study omitted 2-items related to diversity reporting and communication. The 33 items in Konrad *et al*’s D&I practices section had a similar issue. During the pilot test, respondents gave feedback about the length of the survey and individual initiatives needed for analysis. If this study had a longer period to collect responses and interpret the data, this pilot survey would be beneficial. Since this is not the case, this study has omitted a few items from the original survey about recruiting a diverse staff, selecting a diverse staff, and monitoring the effectiveness of staffing for diversity. Per feedback, this study has added a few items more related to accessibility and mental health support in organisations. However, adding and removing these items could mess up the reliability of the questionnaire. Cronbach's alpha coefficients of the current pivot test outlined above are within the higher percentage of reliability. This study will test the reliability of the new items vs the items that were removed and aim for a coefficient higher than .7 in practice.

3.2.2 Analysis

The finalised questionnaire consists of 4 sections including employee demographics, perceptions of D&I scale, D&I practices scale, and the inclusive leadership scale. Out of all the

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210 employees that were randomly selected, 36.7% of the population submitted the questionnaire between May and June 2022. It is important to note that because of the convenient selection process, some employees were sent the questionnaire without the promise of completion. A certain amount of the respondents were employees of the pharma sector personally known by this study. Yet, this type of figure is not usual in terms of a voluntary questionnaire.

Analysis of the data collected by the questionnaire will be discussed at length in chapter 4. Using the IBM SPSS statistics system to find descriptive and inferential statistics, this study will examine the items. Variables will be tested for reliability, significance, and correlation to show overall results. These results will either prove the null hypothesis of no difference or reject it in place of the alternative theory (McClave, 2017). To illustrate findings, there will be a selection of tables, histograms, and bar, pie and dot plot graphs. The hypotheses raised in the literature review will be tested to prove the research question. Any results that are important to discuss will be highlighted and included as main topics in chapter 4.

3.4 Limitations

One limitation this study experienced was a small sample size. Though the pharmaceutical sector in Ireland hosts many organisations from around the world, it is a small niche compared with the secondary data sources. A larger study would benefit an overall picture of the effect of COVID-19 in Ireland. Nonetheless, this research into an identifiable gap is beneficial to future studies. However, there are certain drawbacks associated with the use of the revised questionnaire if this study does not collect enough data. Because this research is largely based on how pharmaceutical employees view their organisations, their leaders, and their perceptions of D&I, the themes should overlap and be prominent throughout the data. With the use of the 3 combined peer-reviewed questionnaires, this study determines that this research instrument is useful in examining the research question and hypotheses proposed for D&I initiatives in the pharma sector in Ireland.

This study also discovered some limitations to the distribution to the sample population. Though understandable, 10% of respondents of LinkedIn messages were cautious of spam. Retrospectively, this study would have benefited by simplifying the survey and getting it approved by more Irish pharma organisations to send sitewide. Though this research method did reach the target respondent, there is a level that could have been implemented through

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organisations rather than individual requests. This is a learning to prepare and get support from the chosen survey population before deciding on a focus group. Another 3% of respondents provided negative feedback as a result of their personal views on D&I. It is not unknown to this study that a portion of the population finds D&I initiatives to be controversial. Yet, this study observes that the purpose of research in this field is to educate everyone regardless of differences. Though the chosen topic for this study is important to research, it is worth knowing that it is a limitation for collecting responses from the sample population.

3.5 Ethical considerations

Before starting this research, there was ethical clearance to ensure the participants in this study have no negative impact. Outlined on the online questionnaire in appendix B, there was a clause where the respondents were informed that the optional questionnaire is anonymous. Their responses will be entered automatically into the main data set with no identifying characteristics specifically relating to the respondent or their organisation. It was important that this study understands that the data collected can be sensitive information.

3.6 Conclusion

Overall, the results will be able to indicate whether the hypotheses of this study are proven or challenged. This methodology was used to determine the positive or negative effect the pandemic had on D&I from an organisational and employee perspective. A key aim of this study is to assess the link between how employees feel about their organisation in terms of inclusivity, how D&I initiatives were influenced by the changing environment, and how inclusive leadership can mediate both factors. Using quantitative data, the effects of COVID on D&I should emerge from the analysis. The next chapter describes the synthesis and evaluation of the data collected from the online questionnaire and reports on any findings and results that prove or disprove the hypotheses.

Chapter 4: Findings

In this chapter, the questionnaire results will be tested to analyse the current effects the COVID-19 pandemic has on Irish pharmaceutical organisations and on D&I initiatives. A measure of what employees perceive as inclusive is needed to determine the positive or negative effects of the changing environment. For this study, the questionnaire will be used to measure

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diversity and inclusivity in the workplace. The two main variables, the perceptions of diversity and inclusion scale Otaye-Ebede (2018) and the diversity and equality management practices scale (Konrad *et al*, 2016) measure whether employees have a positive or negative reaction to their organisation’s D&I initiatives. The inclusivity of the employee’s manager is measured by the variable Inclusive leadership (Carmeli, 2010). These scales are assessed to determine that having a highly scored response signifies a positive perception of their organisation’s D&I. In turn, that perception whether positive or negative gives this study a better picture of the effect on the pharma sector. A reliability test resulted in .936 on the Cronbach alpha scale for all 40 items in the questionnaire. The full Microsoft forms questionnaire used is available in Appendix B for review. The first few sections of this chapter will outline the initial observations and descriptive statistics from the primary data with insights from secondary sources. This includes demographic information and insight into any themes that appear. Once the descriptive statistics are discussed, this study will move on to analyse the inferential statistics. Pearson correlations, nonparametric correlations, t-tests, and reliability tests will be used to test the 3 hypotheses. By the end of this chapter, the reader should have a better understanding of the key themes throughout the literature review and proposed answers to the listed hypotheses.

4.1 Descriptive Statistics

Of the sample population, 77 subjects completed and returned the questionnaire. While there was a range of gender options available the majority identified as 54.5% female and 45.5% male. The respondent age ranged from 18-55+ in groups organised by generation with the highest percentage of respondents in the 25-34 range at 50.6%. Organisation size was also a factor with the majority of the questionnaire population in the larger organisations from 250-500 employees at 32.5% and 500+ employees at 46.8%. The demographic descriptive statistics are listed in *Table 1* below.

Table 1

		Count	Column N %
Q.1 Gender	Female	42	54.5%
	Male	35	45.5%
	Non-binary	0	0.0%

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	Prefer not to say	0	0.0%
Q.2 Age	18-24	10	13.0%
	25-34	39	50.6%
	35-44	19	24.7%
	45-55	8	10.4%
	55+	1	1.3%
	Prefer not to say	0	0.0%
Q.3 Organisation Size	10-50 employees	4	5.2%
	50-100 employees	2	2.6%
	100-250 employees	10	13.0%
	250-500 employees	25	32.5%
	500+ employees	36	46.8%

4.1.1 Perceptions of D&I statistics

The first set of questions aimed to discover the perceptions of diversity and inclusivity in the sample population's organisation as seen below in *Table 2*. This scale has 7-items and a with a Cronbach alpha coefficient of $\alpha .937$. Tavakol and Dennick (2011) highlight that a result from the Cronbach alpha coefficient higher than .7 shows internal consistency and correlation between the items on the questionnaire. From a Likert scale of Not at all (1), Very little (2), Somewhat (3), Often (4), and to a very large extent (5), this section shows that any responses with at least a mean of 3, have a positive perception of the D&I practice. In the absence of an appropriate state variable to determine the true positive and negative rate, this study will assume the rating is positive if greater or equal to 3 which is the median or 2nd quartile (Žerovnik and Rupnik Poklukar, 2017). However, this study understands the limitations this analysis will have without having a true positive state to report and will discuss this in the conclusions section 4.3.

In this case, most of the sample population had a positive association with their organisation's D&I initiatives. With a mean of 3.46, the perception of D&I practices is just above the middle range of the scale. Out of the 7 items, many respondents working in Irish pharma report that their organisations at least communicate D&I objectives from *Q.4* to some extent at 45.5%. This result is positive compared to the 34% that proactively undertaken

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inclusion and diversity awareness raising activity with employees reported during COVID from CIPD (2021a). One theme emerging from the responses of the first variable scale is that employees have a positive outtake on their D&I initiatives in Irish pharma organisations.

Yet, 26.3% of the 77 respondents answered the items with very little or not at all. It is important to note that the following questions that were on the negative part of the scale were about how effective training and development were not seen as something their organisations invest in or communicate about. The question, “*Q.9 Your organisation evaluates the effectiveness of diversity training provided to employees.*”, received 41.6% of the scores “Not at all” and “Very little”. These results are rating their organisations lower compared to EY Ireland’s (2019) D&I survey responses to “*What are the main challenges to progressing Diversity & Inclusion in your organisation?*” at 27.6% for “*not collecting and/or effectively analysing D&I data*”. There appears to be a disconnect from organisations implementing D&I practices without evaluating their data or including how diversity training is measured.

Similarly, to *Q9.*, *Q.10 In the organisation, role models from diverse backgrounds are nurtured and coached to be mentors*, receiving 28.6% of ratings least than Somewhat (3). Across the board, this strategy seems to be something few organisations are investing in. Both EY Ireland (2019) and CIPD (2021a) mention coaching line managers on D&I but not about developing diverse mentors.

Table 2

<i>Descriptive Statistics</i>						
	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Q.4 Your organisation communicates diversity and inclusion objectives to employees.	77	1	5	4.03	1.203	1.447
Q.5 The management of the organisation puts a lot of emphasis on having a diverse and inclusive workforce.	77	1	5	3.88	1.214	1.473
Q.6 Your organisation has formal procedures for obtaining feedback on diversity and inclusive management practices.	77	1	5	3.34	1.353	1.832

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Q.7 Your organisation spends money and time on diversity awareness and related training.	77	1	5	3.60	1.320	1.744
Q.8 Employees of the organisation normally go through training in diversity-related issues.	77	1	5	3.34	1.373	1.884
Q.9 Your organisation evaluates the effectiveness of diversity training provided to employees.	77	1	5	2.87	1.301	1.693
Q.10 In the organisation, role models from diverse backgrounds are nurtured and coached to be mentors.	77	1	5	3.17	1.281	1.642
Valid N (listwise)	77					

Two divergent and often conflicting discourses have appeared from this analysis. Firstly, there is a disconnect between communicating and implementing practices. Particularly in cases of developing diverse staff and reporting the effectiveness of practices and diversity training. Conversely, this study can see compared to the secondary data reported before and during the pandemic that there is an overall increase in positive feedback from employees about their organisation’s commitment to D&I. Further examination into the correlation between factors is needed.

4.1.2 D&I Practices post-pandemic

In the D&I practices section of the questionnaire, the 24-item scale is on a yes (3), not sure, (2), and no (1) rating with a Cronbach alpha coefficient of α .865. With a mean rating of 2.45 from *Table 3* below, this study can conclude that majority of responses were along the yes or not sure range. This result indicates that there is a large number of respondents that are aware of the D&I initiatives in their organisation. This also shows that pharma organisations in Ireland are investing in D&I practices in the post-pandemic setting.

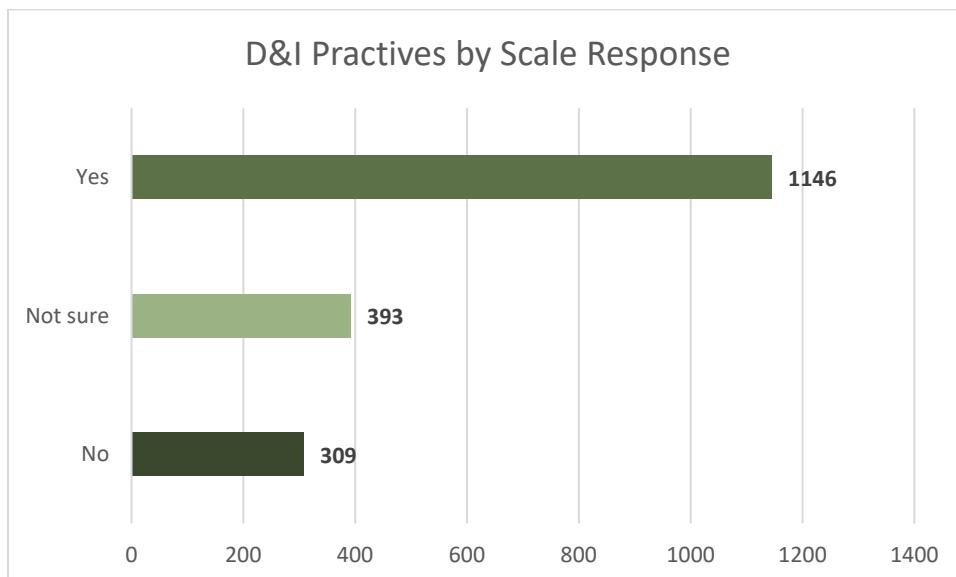
Table 3

<i>Descriptive Statistics</i>					
	N	Minimum	Maximum	Mean	Std. Deviation
D&I Practices	77	1.33	2.88	2.4529	.34474
Valid N (listwise)	77				

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As outlined in *Table 8* in Appendix C, the top 3 items that respondents answer yes to are *Q.15.3 Healthcare benefits or Life insurance* at 94.8%, *Q.14.8 Paid Maternity or Paternity leave* at 92.2%, and *Q.11.6 Have an Anti-discrimination policy* at 89.6%. The overall positive results for *Q.15.3* and *Q.14.8* can be explained by the nature of these benefits and normal communication from the organisation. A common view amongst interviewees was that they are aware of an anti-discrimination policy in place. Indicated on the D&I practices scale this shows that the respondents believe their organisations may link diversity to strategic business goals and human resource planning.

Figure 1



However, as illustrated above in *Figure 1*, some of the sample population answered items more uncertainly than others. The highest amount of not sure (2) responses was 50.6% for *Q.11.4 Set goals for achieving staff diversity for specific positions*, 44.2% for *Q.14.3 Job sharing* and 37.7% for *Q.12.3 Require hiring managers to interview a diverse group of candidates*. Both *Q.11.4* and *Q.12.3* were observed to be related to having and hiring diverse employees. This indicates that the respondents may not have communicated with their organisations about certain diversity recruitment initiatives. This is opposed to EY Ireland’s (2019) survey with 53%, yes and 10% do not know for the question, “*Our organisation has reviewed our hiring practices with a D&I lens.*” Irish pharma organisations will need further improvements to their diverse recruiting practices to have a positive result with employees’ perspective of D&I. Item *Q.14.3*

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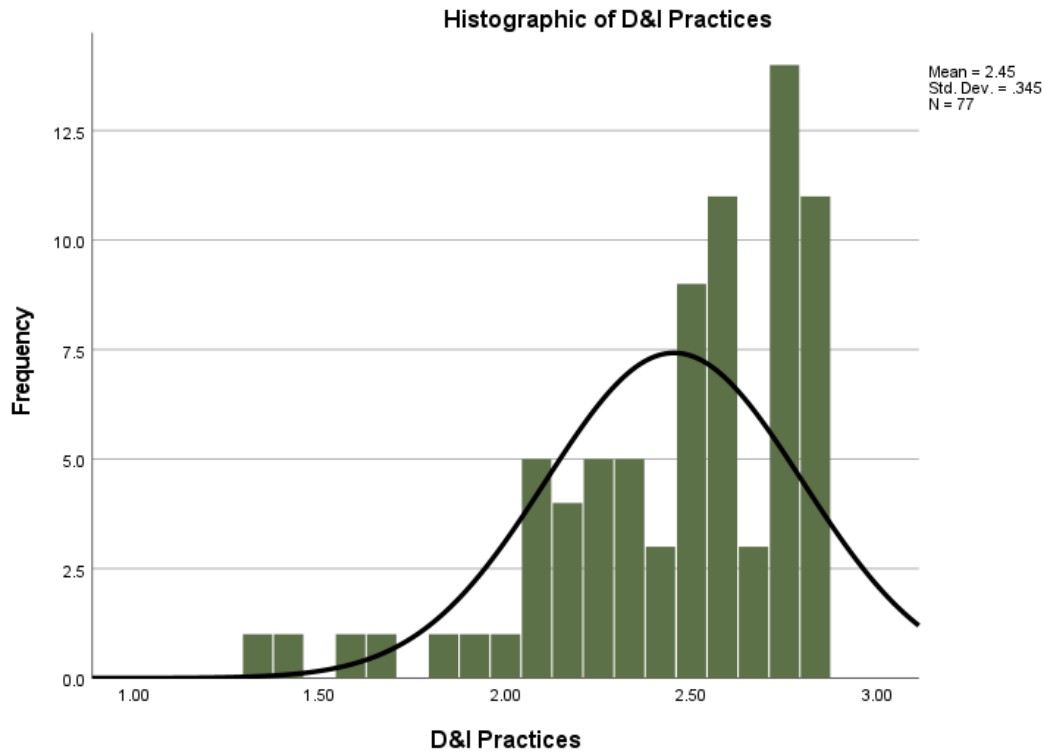
also had a high response rate for not sure (2). It is unclear to this study whether pharma organisations have included job sharing in their flexible working models. However, the results do indicate that at least 26% have added this arrangement to help with their work-life balance initiatives.

As illustrated in *Table 3* above, no respondent answered yes to all options in the D&I practices scale with the minimum responses at 1.33. Additionally, the results indicate that some practices are not implemented in certain pharmaceutical organisations. At 49.4% of the sample population, *Q.14.5 Modified work week, such as a condensed work week (fewer than 5 days)* had the most amount of no responses. Similar results were shown with *Q.14.6 Part-time employment for professional/technical/managerial staff* at 32.5% of respondents answering no (1). This is surprising compared to the CIPD (2021a) survey showing that over half of respondents said hybrid and remote working were being added to recruitment strategies. However, this study does take into consideration that in the pharma industry there are certain aspects of the business where some departments are in lab work or on shift patterns that may not be suitable for a flexible working arrangement. More surprisingly, *Q.11.5 Communicate Diversity and Inclusion reports* reported no at 33.8% that their organisations did not give them access to D&I reports. This shows that there is little change since EY Ireland's 2019 survey from the question, "Does your organisation publicly communicate information about D&I goals and targets?", with 35.6% responding no. This ties into the theme that the Irish pharma sector has a disconnect with evaluating their D&I data.

As shown in *Figure 2*, there are some outliers that have answered the items in the D&I practice scale. What this suggests to this study is that some respondents believe their pharmaceutical organisation is behind in terms of developing their D&I initiatives. However, in the next few sections, this study will examine why some respondents in the sample population are negatively responding to the D&I practices scale.

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Figure 2



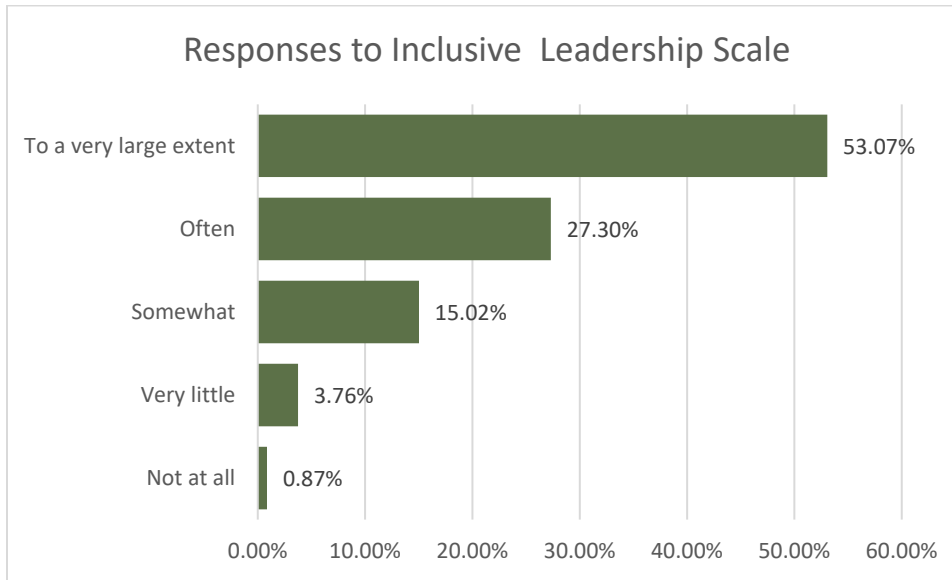
Overall, the effects of COVID-19 appear to have positively affected the number of D&I practices initiated post-pandemic. However, a further examination should be done to correlate why some initiatives are not effectively communicated or have not been put in place. Additionally, this study will look at the differentiating effects of the demographic statistics to understand the several outlier responses. Specifically, this study will measure the correlation between the different variables to confirm the validity of the responses.

4.1.3 Inclusive Leadership

The 9-item scale about inclusive leadership included in the questionnaire measures the sample population responses on a Likert scale of Not at all (1), Very little (2), Somewhat (3), Often (4), and to a very large extent (5) with a Cronbach alpha coefficient of $\alpha .942$. This study reports that most responses to this scale are 53.07% on the highest level and only .87% on the lowest, as seen in *Figure 3* below.

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Figure 3



This scale is divided into three different qualities of an inclusive leader. A combination of openness, availability and accessibility are traits proven to show that a manager is inclusive. From *Table 9* in Appendix D, the respondents have positively answered *Q.16 My manager is open to hearing new ideas*, at 97.4% with 11.7% answering somewhat (3), 27.3% of often (4), and 58.4% to a very large extent (5). Since the first 3 items measure openness, this study concludes that it is one of the most common traits in the respondent's line managers. Moreover, the 3-items to measure openness received the highest overall mean of 96.5% positive responses. However, this study reports that the 4-items measuring availability also received a high score with a mean of 94.8% for responses between 3-5. Receiving the same high score at 94.8%, the last 2-items measure accessibility. Referring to secondary data on inclusive leadership shows that there is an increase in organisations that provide inclusive leadership training to senior leadership at 43% (EY Ireland, 2019). Since the questionnaire does not supply details on inclusive leadership training, this study must presume that though it is not reported, some managers are following inclusive practices.

Conversely, it is important to examine which items on the inclusive leadership scale received negative results meaning a score of not at all (1) and very little (2). With a mean of 7.8% from negative ratings, *Q.20 My manager is an ongoing 'presence' in this team; someone who is readily available*, this item measuring availability is the least seen in the sample

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populations' line managers. Interestingly, there were also low ratings for another availability item at 5.2% for *Q.19 My manager is available for consultation on problems*. This theme of low availability for the respondents' line managers is confirmed to be in low numbers if compared to the overall mean. However, it raises a question as to why some respondents are answering this way. Another item can be seen in *Table 9* in Appendix D to have low ratings for *Q.23 My manager encourages me to access them on emerging issues*. As one of the accessibility measures for the inclusive leadership scale, this indicates a disconnect between some respondents with active participation from their line managers.

If there was an initiative to increase the training for managers in this key measure, this study believes the overall result would have been more positive. However, this study reports that in the Irish pharma sector, the majority of the sample population view their manager as highly open, available, and accessible to support them. Thus generally, the line managers have followed the first steps to inclusive leadership.

4.2 Inferential statistics

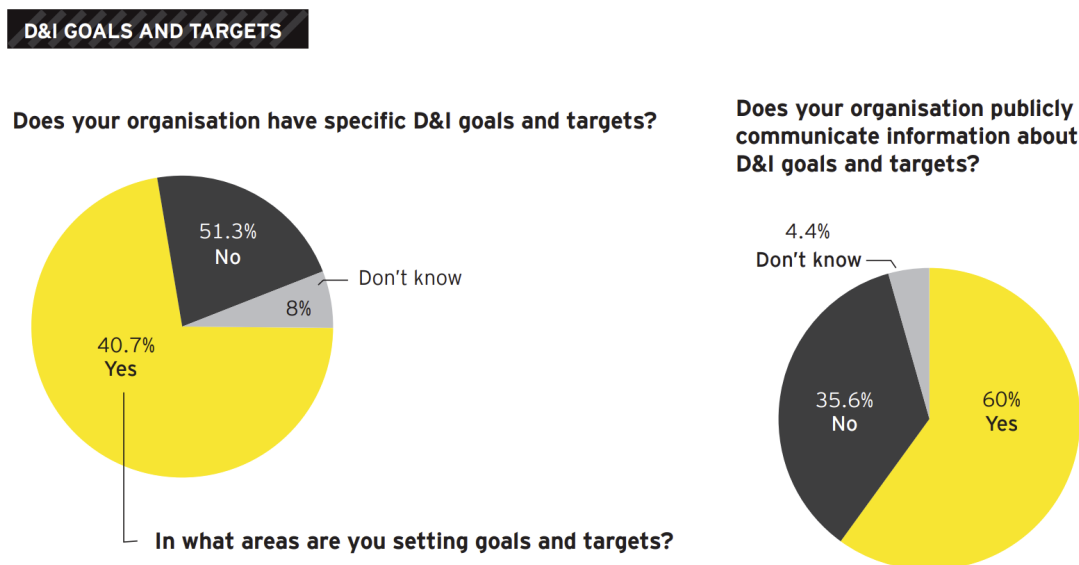
In this section of chapter 4, this study will attempt to answer the raised questions and hypotheses about the effects of COVID-19 on D&I initiatives in the Irish pharmaceutical sector raised throughout the literature review. The themes and overall research question will also be discussed with the results of the questionnaire. These results are used to show what the key results are but not to describe all details of the questionnaire (Turner, 2019). The first part of the review will go into detail about the correlation between the perceptions of initiatives and the D&I practices in place, the demographic differences in responses, if significant, and the correlation between flexible working arrangements and inclusivity. An attempt will be made to link this result with the secondary data for comparable results from the pre-pandemic and pandemic period. Since the reliability of the questionnaire has been tested, this section will focus on correlation and validity. The following sections 4.2.1, 4.2.2, and 4.2.3 will outline different hypotheses and attempt to answer them with an interpretation of the results. At the end of the chapter, this study will summarise the initial findings and highlight anything that will be discussed at length in chapter 5.

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4.2.1 Hypothesis 1 – Perceptions vs practices

Hypothesis 1 suggested that the COVID-19 pandemic increased the need for Irish pharmaceutical companies to communicate their D&I initiatives to their employees. To give context to the assumption that the pandemic increased the need to communicate, this study will first look at the reported levels of public reports and communications in a pre-pandemic environment. The secondary data source, EY Ireland’s survey, shows that the perception of D&I in 2019 from the participants listed in *Figure 4* below, was high at 60% for publicly communicating initiatives and below 50% for specific goals and targets (EY Ireland, 2019).

Figure 4



(EY Ireland, 2019)

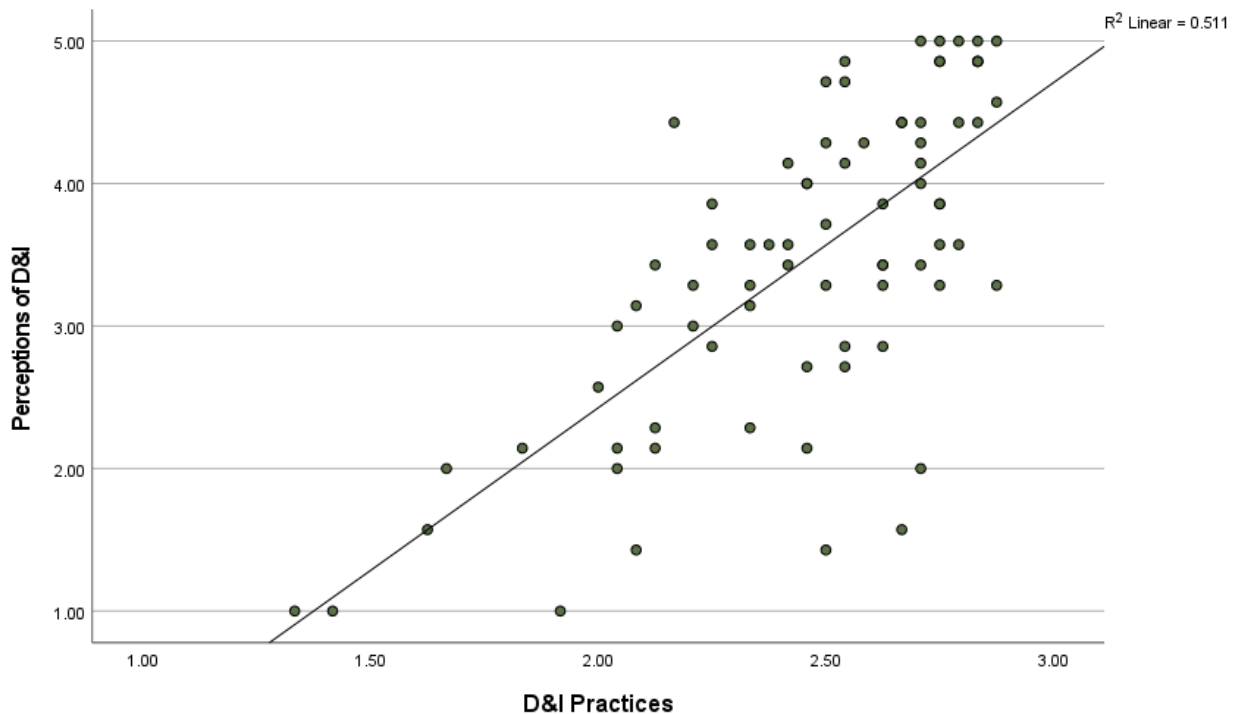
However, in a report by CIPD in 2021 a year after the pandemic started, the results were less positive with 34% of HR leaders focused on raising D&I awareness among employees (CIPD, 2021a). This data indicates that there was a negative impact because of the COVID-19 pandemic. This raises the question of whether employees from this study in a post-pandemic setting, see organisations that communicate D&I objectives as filling their promise with effective D&I policies and practices.

This theory proposes that to prove that the pandemic increased the need for more effective communication of D&I initiatives, there needs to be a positive correlation between the perceptions of D&I initiatives in Irish pharma and the initiatives in practice. Therefore, this

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study grouped the perceptions of the D&I scale (7 items) and the D&I practices scale (24 items) into independent variables. By comparing these variables using the Pearson Correlation coefficient, this study outlines that a correlation between two variables under 1.0 is deemed negatively correlated and above 1.0 positively correlated (Laed Statistics, 2022a). The Pearson correlation was shown as $r = .715$ and a p-value of .001. This suggests that the two variables are positively correlated. However, as shown in *Figure 5*, there are several outliers in the data.

Figure 5



Therefore, this study has also run a Spearman Rank Correlation (*Table 4* below) to confirm that the Pearson coefficient has not been skewed by some of the respondent's answers. The Spearman rank correlation has a value of .680. Since the Spearman rank correlation has a positive association with anything over .5, this study, therefore, confirms that the correlation between the two variables is positively correlated (Mitchell, 1996). This means that the response rate is higher on the scale if the response to each variable is high and vice versa if the responses are negative.

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Table 4

Confidence Intervals of Spearman's rho

	Spearman's rho	Significance(2-tailed)	95% Confidence Intervals (2-tailed) ^{a,b}	
			Lower	Upper
Perceptions D&I – D&I Practices	.680	<.001	.533	.787

a. Estimation is based on Fisher's r-to-z transformation.

b. Estimation of the standard error is based on the formula proposed by Fieller, Hartley, and Pearson.

In terms of significance, this study confirms that the p-value is less than .5. this means that this study will reject the null hypothesis that there is no effect between the two variables. Instead, the p-value shows that there is a significant effect between the two and therefore the alternative hypothesis is proven correct. This implies that when respondents have a negative rating of diversity practices, they have a negative perception of inclusivity in their organization. Since there is a correlation between a negative perception and a negative view of the practices, this study confirms that if there is no communication of diversity and inclusion initiatives then there is an effect on the employee's view of their organization's inclusive practices. Because the secondary data has shown that the pandemic decreased the amount of communication between organisations and employees about their D&I initiatives, it has increased the need for communication in a post-pandemic setting. Hypothesis one has been proven correct.

4.2.2 Hypothesis 2 – Flexible working and inclusive culture

Hypothesis 2 suggests that flexible working arrangements promote an inclusive culture. To test this theory, this study created a new variable to group all flexible working arrangements from the diversity and inclusion practices scale. This 6-item variable will be tested for correlation with both the perceptions of diversity and inclusion scale to determine whether employees link inclusive organizations with flexible working arrangements. The new flexible working variable has a Cronbach alpha coefficient of α .799 and consists of questions 14.1 to 14.6 as seen in Table 8 in Appendix C. When compared to the perceptions of diversity inclusion scale, there seems to be a positive result greater than .05 on the Spearman rank correlation (Table 5 below). From the previous section, this study has already compared the perceptions of D&I with all items on the D&I practices scale. Therefore, it makes sense that the flexible working variable has a similar correlation. However, since the p-value is calculated at .18. this study cannot reject the null

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hypothesis of no difference (Laed Statistics, 2022b). This study proposes that there is no correlation between flexible working and the perceptions of the D&I scale.

Table 5

Nonparametric Correlations			Flexible Working	Perceptions of D&I
Spearman's rho	Flexible Working	Correlation Coefficient	1.000	.154
		Sig. (2-tailed)	.	.182
		N	77	77

** . Correlation is significant at the 0.01 level (2-tailed).

Conversely, when studying the HR practices in Ireland survey from CIPD (2021a), there is data to suggest that women are 48% more negatively affected by remote working than men because of childcare and care responsibilities while working from home. This study proposes using its primary data from the questionnaire to test whether women have a lower perception of diversity and inclusion than men. Firstly, this study will determine if there is a difference between the identified genders from their answers on the questionnaire tested by a t-test for Equality of Means to see if there are equal associations between females and males in terms of the perception of the D&I scale. This study determines from *Table 6* below that because the p-value for Levene's Test for Equality of Variances is more than .05 at .383, the null hypothesis cannot be rejected. Additionally, the t-test for Equality of Means significance is also more than .05. Thus, the null hypothesis of that male and female respondents has the same perceptions of their D&I practices is confirmed.

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Table 6

<i>Group Statistics</i>											
		Q.1 Gender	N	Mean	Std. Deviation	Std. Error Mean					
Perceptions	Female		42	3.3844	1.13608	.17530					
D&I	Male		35	3.5510	1.06631	.18024					

<i>Independent Samples Test</i>											
		Levene's Test for Equality of Variances				t-test for Equality of Means					
						95% Confidence Interval of the Difference					
						Significance					
						One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Perceptions of D&I	Equal variances assumed	.771	.383	.659	75	.256	.512	-.16667	.25290	-	.33714
	Equal variances not assumed			.663	73.906	.255	.509	-.16667	.25143	.66766	.33433

The same analysis was performed between the gender and flexible working variables. The Levene's Test for Equality of Variances resulted in a p-value of .284 and the t-test for Equality of Means significance had a p-value of .942. In both cases, the significance level was above .05. Thus, the null hypothesis of no difference is upheld.

After an examination of the primary data, there is no evidence to suggest that employees that have a range of flexible working arrangements view their organisation as more inclusive. Though the secondary data finds this to be the case during the pandemic, this study does not find the same results with the Irish pharma sample population. Therefore, hypothesis two is not proven to be correct because the null hypothesis is withstanding.

4.2.3 Hypothesis 3 – Inclusive leadership and D&I practices

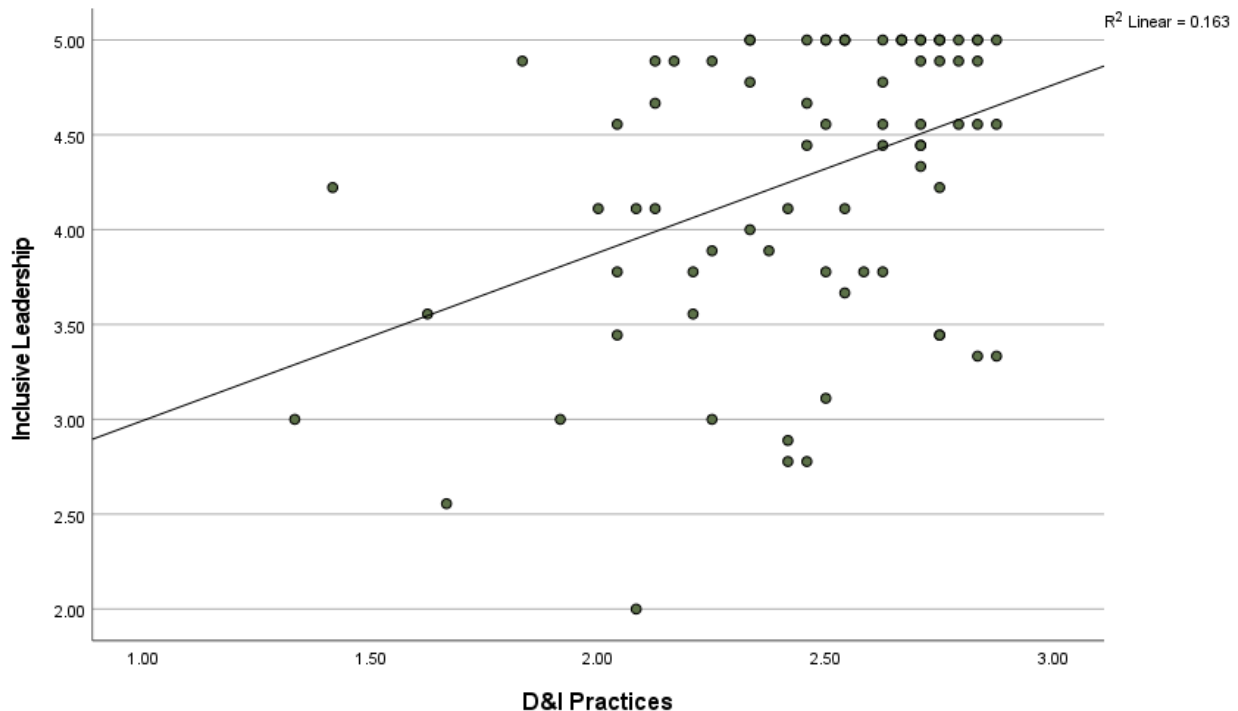
Lastly, hypothesis 3 proposes that D&I initiatives are more effective in tandem with inclusive leadership. This hypothesis is a large part of the EY Ireland (2019) and CIPD (2021a) surveys on inclusion practices. As previously mentioned, EY Ireland (2019) correlated inclusive leadership as the key to building an inclusive culture but only 43% of senior leadership and 27% of board members from their respondent results had inclusive leadership training. CIPD (2021a) reported an increase during the pandemic to 45% of their respondents providing D&I training for line managers. These results compared to the data shown in *Figure 6* below appear that

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respondents in the Irish pharma sector positively view their managers as inclusive. This study will examine the correlation between the inclusive leadership scale and the D&I practices scale to determine whether it supports the hypothesis.

Using a scatter plot to illustrate the responses of employees below in *Figure 6*, this study infers that there is a positive correlation between perceptions of an inclusive leader and D&I practices.

Figure 6



As a result of *Figure 6*, a few outliers seem to prove the hypothesis that inclusive leadership is linked to their D&I practices because of the negative few for both variables. However, it is interesting to highlight that some outliers on the lower part of the range for the D&I practices scale would have a mean around 2.0 but have a higher rating for their manager on the inclusive leadership scale. This suggests that even though these respondents view their manager as inclusive, they have a smaller range of or do not know about their D&I practices. A further understanding of the connection is needed by correlation analysis. This study has found that because of the several outlier responses to both variables, the spearman correlation analysis is proficient.

As shown in *Table 7* below, there is a positive correlation at .379 between the two variables since the result is above .05. Similarly, there is a p-value less than .05 therefore the

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study will reject the null hypothesis that there is no difference. This proves the alternative hypothesis that respondents with high ratings for inclusive leadership in their organisation also have a positive rating for their D&I practices.

Table 7

Correlations

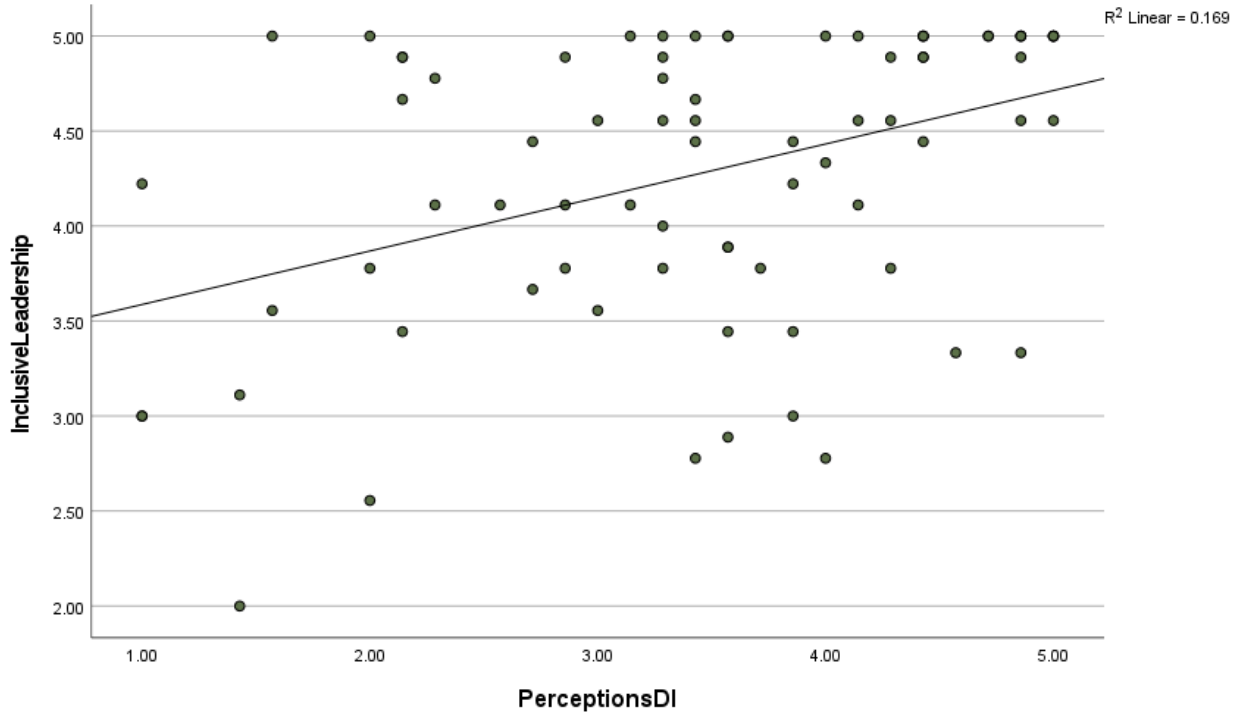
			Inclusive Leadership	D&I Practices	Perceptions D&I
Spearman's rho	Inclusive Leadership	Correlation Coefficient	1.000	.379**	.404**
		Sig. (2-tailed)	.	<.001	<.001
		N	77	77	77
	D&I Practices	Correlation Coefficient	.379**	1.000	.680**
		Sig. (2-tailed)	<.001	.	<.001
		N	77	77	77
	Perceptions D&I	Correlation Coefficient	.404**	.680**	1.000
		Sig. (2-tailed)	<.001	<.001	.
		N	77	77	77

** . Correlation is significant at the 0.01 level (2-tailed).

Since it has been proven that the two variables inclusive leadership and D&I practices are linked, this study aims to assess whether respondents who rate highly on the inclusive leadership scale also have the same feeling about the inclusiveness of their organisation which is measured by the perception of D&I scale. Illustrated below in *Figure 7*, there is a possible correlation between the variables. The Spearman rank nonparametric correlation showed above in *Table 7* that there was a .404 positive correlation for the variables. The null hypothesis is rejected due to the <.001 p-value. Thus, the alternative hypothesis that there is a difference in results for the variable is supported.

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Figure 7



The key findings for the connection between inclusive leadership and D&I practices are that they are positively correlated with each other. This means that the more D&I practices a respondent has the more they view their manager as an inclusive leader. Comparing the results to the secondary data suggest that inclusive leadership training or diversity training for senior leadership is important to inclusivity in organisations. This study then went on to propose that there was also a link between the perception of D&I and inclusive leadership. Because both scales measure inclusivity, it was important to prove that they correlated. This study infers that the respondents with high inclusive leadership in their organisations have a stronger view of inclusiveness with their D&I practices. Hypothesis 3 is supported by these results.

4.3 Conclusion

This study offers some important insights into the Irish pharmaceutical sector and the impact their D&I practices have on their employees after the pandemic. With 77 respondents, there was a large amount of the sample population answered highly to the 40-item questionnaire.

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In section 4.1.1, this study proposed that based on the primary and secondary data, there is an increase since the pandemic in the employee's perception of inclusivity with their organisation's D&I practices. It was also determined in section 4.1.2 that COVID-19 has positively increased the number of D&I practices based on the secondary data listed in *Table 10* in Appendix E. However, it was discussed that there is a disconnect between employees and their organisations in communicating their D&I initiatives. This is illustrated in *Figure 1* by the 21.3% of respondents that answered not sure. Additionally, most respondents at 95.4% positively associated their managers with the 3 measures of the inclusive leadership scale. Overall, the respondents had positive views of their D&I initiatives and the organisation's inclusiveness after the COVID-19 pandemic.

To determine whether the pandemic positively or negatively affected D&I initiatives in the Irish pharmaceutical sector, several variables including perceptions of D&I, D&I practices, inclusive leadership, and flexible working were tested for correlations. In conjunction with the secondary data, this study infers that there is an increase, since the pandemic, in positive associations employees, have with their organisations inclusively. The correlation between perception, D&I practices, and inclusive leadership was proven to be positively linked. Negative perceptions of inclusively resulted in negative views of D&I practices and had a lower percentage of D&I practices in place. This inferred that the pandemic has increased the need to communicate objectives to employees for a more positive perception of D&I. Interestingly, this study found no evidence to determine that flexible working has an impact on inclusivity. This also includes that there is no difference between identified genders in their perception of D&I practices even though there are studies that list women as negatively affected. Furthermore, respondents that rated their managers highly from the inclusive leadership scale, had a positive view of inclusivity and their D&I practices.

This study has found evidence to suggest that the COVID-19 pandemic has positively affected the Irish pharmaceutical sector's D&I initiatives. Results infer that there has been an increase in the scale of practices, the perceived inclusivity of D&I practices, and the inclusivity of line management. More research on a larger scale would be significant to support these findings from this study.

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Chapter 5: Discussion

In this chapter, there will be critical evaluations of the important results of the study. Findings outlined in chapter 4 will be discussed to form an overall opinion on the implications and to suggest approaches to future research. There will be an examination into how the literature review of the study is linked to the primary and secondary data and discuss what the findings mean considering both arguments for a positive or negative effect. Section 5.1 will outline the findings on inclusivity in the Irish pharmaceutical sector. In section 5.2, there will be a discussion around the need for effective communication of D&I initiatives. Lastly, there will be an argument to suggest that line management needs to be committed to delivering and supporting HR practices.

5.1 Positive impact on Inclusivity

As mentioned in the literature review in chapter 2, organisations in Ireland have a demand because of globalisation to attract and retain diverse talent. It is also listed in the literature that the inclusivity of organisations is a large factor to consider for goals in D&I to be achieved. The results of having diverse talent were listed as increased productivity and innovation (Kharroubi, 2021). Therefore, it is important to discuss why the findings of the questionnaire were positive regarding the perception of D&I initiatives. The findings of this study found that it is not enough to implement diverse management practices in organisations without building an inclusive culture to support them. This view is supported by Tuggle *et al.* (2022), where it is highlighted that having higher diversity does not correlate to the beneficial outcomes of productivity and innovation if employees are not supported to contribute. The correlation between perceptions and D&I initiatives in practice support this theory.

Yet, hypothesis 2 was proved by the primary data to be incorrect in assuming that flexible working influences perceived inclusivity. This is opposed to the research this study examined in section 2.2.2 where studies suggested either negative or positive that there should be an impact. A limitation to that result could be that the questionnaire failed to collect diverse demographics that would highlight any differences in responses. However, testing gender as a variable for correlation to flexible working also produced no significant result. This study proposes that employees of the Irish pharmaceutical sector no longer see flexible working as a tool for inclusivity after the pandemic. Organisations may have bridged the gap in negative effects of

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COVID-19 and normalised flexible working by implementing working from home supports and increasing the range of options to attract and retain diverse talent (Wiatr, 2021).

Like the limitations listed in chapter 3, this study finds that a larger population size would have been beneficial to increasing normality in the primary data. This suggests that some responses to the different variables are quite different to the main respondent pool. However, the overall result was significant enough to provide evidence that there is positive inclusivity in the sector. Further studies into this topic could find the correlations between high ratings of inclusivity with different minority groups. This may provide a better result in understanding the underpinnings of an inclusive culture.

5.2 Need for communication

There is also the question as to the scale at which pharmaceutical organisations in Ireland are effective at communicating their D&I practices. Though there was an overall positive view of D&I initiatives from the sample population, there was a finding in section 4.1.2 that 21.3% of employees are not aware of certain practices. It is unclear from the results of the questionnaire where the disconnection starts. This is supported by the research in the literature review by highlights the need for including D&I initiatives in internal communications and getting employees involved in developing D&I initiatives (Pellecchia, 2019, CIPD, 2021a). Conversely, in *Table 2* in section 4.1.1, there is a high level of employees shown that are aware that their organisations have D&I objectives. Though when compared to Q.11.5 on *Table 8* in Appendix C, it is evenly split across the response options as to whether there is communication for D&I reports. With the addition of legislation around the gender pay gap, organisations need to be aware that D&I reports will become a required function because of HR practices. This is supported by EY Ireland (2019) reports that there is a severe disconnect between practices in place and what HR teams are reporting.

A caveat that should be noted about the study is that the sample population was randomised within the Irish pharma sector. This researcher has more connections within the HR field and senior leadership. This may have increased the number of employees implementing D&I in their organisations that completed the questionnaire. Because of the nature of HR, this may have increased the statistics of employees knowing what D&I practices are in effect. Future studies should collect data on communicating D&I initiatives with a population of employees

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from a specific department or position that has less involvement in creating objectives to gain an unbiased view.

5.3 Commitment from line management

Another significant aspect of the findings in chapter 4 was that inclusive leadership clearly impacted perceptions of D&I and D&I practices from the primary data. This positive correlation to the perception of D&I (.379) and D&I practices (.404) was significantly larger than this study anticipated. In the literature review, there was debate as to whether inclusive leadership is important to mitigate a crisis. However, previous studies have demonstrated that a strong relationship between communication and inclusive leadership is essential for D&I. Managers who had open communication with their employees during a crisis increased collaboration to establish strong relationships (Ulmer, 2012) and created an inclusive environment (Kuknor and Bhattacharya, 2021). Therefore, this study proposes that it is equally important for line management to promote commitment to D&I practices. Employees would have a higher view of the organisation's inclusive initiatives and benefit from the support from their managers.

Introducing diversity education and training to line managers is also an area of D&I that the literature review advocated for. As discussed in section 4.2.3, the positive correlation between the two D&I variables finds that there is a connection to inclusivity. This study proposes that diversity training should be hand in hand with cultivating inclusive leadership. The benefits of diversity training are significant findings to support diverse employees, especially through the COVID-19 pandemic. Mor Barak *et al.* (2022) conclude that HR practices are not effective if they are communicated from the top-down but built between line managers and employees for an inclusive culture. With the increase in the sample population responding that their leaders have had diversity training illustrated in 4.2.3, this study infers that this finding is a great first step towards D&I commitment from line management.

A limitation was revealed when this study had difficulty finding the true positive state of the inclusive leadership variable. If respondents were asked yes or no if they view their manager as an inclusive leader as an added item, the study would have been able to use it as a control in the inclusive leadership scale. This study concludes that there could be further investigations into the impact of an inclusive leader on the employee's perceived organisational culture on a broader

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scale. Additionally, measures of effective communication could be included to determine how well inclusive leadership are at communicating D&I initiatives to employees.

Chapter 6: Conclusion

The purpose of this study was to select an area of research that envelopes the major themes emerging around D&I initiatives. This study researched the effect of the pandemic on D&I initiatives in the Irish pharmaceutical sector and concluded that there was evidence of an overall positive effect. Through the literature review in chapter 2, several topics were discussed including an overview of the pharmaceutical sector in Ireland, definitions of diversity and inclusion, and research into perceptions of inclusivity, D&I practices during the pandemic, and inclusive leadership. These topics focused on the effect of employee performance, innovation, communication, and well-being. Overall, the hypotheses of this study were tested using an online questionnaire that had interesting findings about D&I initiatives and their connections to the sample population.

Through the methodology in chapter 3, the 3 hypotheses listed throughout the literature review were tested by a random sample of employees in Irish pharmaceutical companies. These findings may be somewhat limited by the smaller, specialised scope of this research proposal. However, further research should be undertaken to investigate the overall effect of COVID on D&I initiatives on a larger scale. In chapter 4, it was inferred that the pandemic influenced increased communication about D&I initiatives to employees. Conversely, this study has been unable to demonstrate through the research method used that flexible working arrangements have any effect on inclusivity with organisations in the pharma sector. The limitation of not collecting demographic information around minority groups is something that this study would have liked to incorporate posthumously. The third proposed hypothesis suggested that D&I initiatives are more effective when there is influence from inclusive leadership. Since there was a substantial number of respondents rated their managers highly on the inclusive leadership scale, this study positively correlated inclusive leadership to the perception of D&I and current D&I practices. As stated in the literature review, inclusive leadership is an effective way for organisations to combat the negative effects of a crisis like the pandemic. Together, these hypotheses along with the main themes of the study paint an overall picture to help answer the main research question. The results

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of this investigation show that COVID-19 is a major factor in positively affecting the D&I initiatives of the Irish pharma sector.

These findings contribute in several ways to our understanding of the pandemic on D&I in Ireland and provide a basis for further research into the subject. Notwithstanding limitations from a small sample population, this research offers valuable insights into the perceptions of employees into why there is a disconnect between initiatives HR departments implement and the effect on attracting and retaining diverse employees. Further studies could use a natural progression of this work to analyse in more depth why the pandemic accelerated certain HR practices and limited others.

6.1 Recommendations

The findings of this study suggest several courses of action for HR professionals. Considering the research into D&I practices, this study suggests starting with a backwards evaluation of collecting key diversity and inclusion data on an organisation before diving into larger initiatives. This approach would provide HR with a critical point of focus to improve on. Ideally, the point of focus would be something that positively affects all employees. This is in line with the results of the perceptions of the D&I scale where employees view their organisation as inclusive if there is effective communication. However, there would be a cost to starting D&I from scratch with more resources and time needed to collect data. This study proposes that this method would allow D&I practices to become streamlined and more effective overall.

Similarly, this study proposes that organisations and HR professionals use the D&I data collected to report on the current state of D&I objectives, initiatives, and diversity rates. With the recently required reporting on the gender gap, organisations in Ireland will have to collect and report on D&I already. The need for communication of D&I initiatives is an important result of this study. While some organisations are trepidatious to report on diversity if it is not up to the level they wish, this study sees this as an opportunity to show openness and accountability with employees.

Numerous studies list diversity education as a cornerstone to creating an inclusive environment. However, this study recommends following up training by evaluating the effectiveness of the diversity education implemented. Not only with this work justify costs, but it

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could also provide critical insight into practices that work. Ineffective D&I initiatives are not worth the workload on HR departments. Important training to consider if benchmarked correctly are unconscious bias, inclusive leadership, and diverse recruitment training. Overall, this study recommends looking into the awareness of employees of D&I initiatives as the main goal for organisations in the Irish pharmaceutical sector.

6.2 Implications of Findings

The implications of the findings in this study are mainly focused on implementation and costs to organisations. Understandably, most organisations are cautious of promising initiatives with substantial costs to the business. Preparing for collecting D&I data could include setting a 2-month timeframe for employees to upload their diversity information into an HR system. This allows the HR professionals to continue day-to-day activities while data is collected. However, once some data is collected, there will be a cost to maintain this data with members of the HR team spending time on its upkeep. In cases where the organisation has no HR system, the cost for implementation is considerable at the beginning with most HR technologies costing in the thousands per year. Yet, the impact of having the technology implemented in 1- or 2-years' time would decrease the administrative costs and free employees to focus on other HR initiatives.

Comparably, the implementation of D&I communications could be more time-consuming than collecting data. This study proposes that organisations assess the time needed to compose and communicate HR objects and goals with D&I accurate reports and internal sitewide publications. Though this method may not have a tangible cost, it would need resources that could take employees away from their normal tasks. Without a clear analysis of the time needed to create and report periodically, this D&I initiative would not be beneficial to the organisation.

Investing in diversity education is a sizable upfront cost to organisations. However, by benchmarking and planning for potential costs, HR teams can prioritise key training needed as well as compare external training providers to assess the best price for output. Creating a yearly timeline for leadership training would be beneficial to start L&D practices for D&I initiatives. Thus, evaluating training effectiveness is also a practice to consider. Calculating the cost of training investments is useful to provide feedback on the value of implementing diversity training. It is important to get support to deliver initiatives in what would be a potential financial cost to the business.

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Chapter 7. Personal statement - CIPD

Whilst conducting this research, this study cannot report its findings without reflecting retrospectively on the learning experience it has provided. Because of this study, these topics became a personal interest that will follow throughout all work experiences and not just related to HR. Having worked closely with the Irish pharmaceutical sector for a few years, this study was very relevant to an expatriate discovering the different social norms that came with living in Ireland. Perhaps the biggest takeaway for the researcher is that diversity and inclusion practices have become a crucial part of the post-pandemic environment. Studying the effects of Covid on D&I in Ireland has filled a gap in the current knowledge of the “new normal” in organisations. This researcher could have been more effective at managing time and resources to collect more responses for the questionnaire. However, the amount of support this study had received in terms of completing this dissertation has been immense. It has not been an easy task to return to education and pursue a master’s degree whilst in the midst of a pandemic, but this researcher would not trade the time for anything else.

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11 Appendixes

Appendix A

Description: Request for participation in the questionnaire

Hi,

I'm researching diversity and inclusion initiatives post-covid in the Irish pharma sector for my master's dissertation. If you have a spare moment, would you mind filling in my survey?

<https://forms.office.com/r/cRs6gYkhA4>

Much Appreciated,

Nora Goggin

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Appendix B

Description: Questionnaire outline and ethical considerations

This survey is to collate final research for a dissertation in Human Resource Management. The purpose of this research is to investigate the impact the COVID-19 pandemic had on diversity and inclusion practices in the Irish pharma sector. This survey asks your opinion on aspects of your organisation's diversity and inclusion initiatives, perceptions of your work environment, and inclusivity of your line manager. Your answers will add to current understanding of how the pandemic has shaped current diversity and inclusion initiatives and whether they are effective in practice. Please only take part in this research if employed by an organisation in the Pharma sector including biopharma, pharma manufacturing, etc.

If you decide to take part, the questionnaire should take about 5 minutes. Many of the questions are opinion-based. There are no wrong answers. The information you provide will be completely anonymous. You will be asked to provide demographic information for academic use of the researcher only. You will not be asked your name or the organisation you work for. All completed surveys will be entered automatically into a main data set with no identifying characteristics. There will be no risk posed to you as a participant of this study.

Your participation would be greatly appreciated. Your decision to take part in this study is completely voluntary and you can withdraw your participation at any point before completion.

Demographics

1

Gender

- Female
- Male

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- Non-binary
- Prefer not to say
- Other

2

Age

- 18-24
- 25-34
- 35-44
- 45-55
- 55+
- Prefer not to say

3

Organisation Size

- 10-50 employees
- 50-100 employees
- 100-250 employees
- 250-500 employees
- 500+ employees

Diversity and Inclusion Participation

4

Your organisation communicates diversity and inclusion objectives to employees.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

5

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The management of the organisation puts a lot of emphasis on having a diverse and inclusive workforce.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

6

Your organisation has formal procedures for obtaining feedback on diversity and inclusive management practices.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

7

Your organisation spends money and time on diversity awareness and related training.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

8

Employees of the organisation normally go through training in diversity-related issues.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

9

Your organisation evaluates the effectiveness of diversity training provided to employees.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

10

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In the organisation, role models from diverse backgrounds are nurtured and coached to be mentors.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Diversity and Inclusion Initiatives

11

Does your company _____

11.1 Include valuing diversity in the company's mission or values statement?

Yes No Not Sure

11.2 Align diversity strategy with the business strategy?

Yes No Not Sure

11.3 Have an internal diversity/inclusiveness committee or council?

Yes No Not Sure

11.4 Set goals for achieving staff diversity for specific positions?

Yes No Not Sure

11.5 Communicate Diversity and Inclusion reports?

Yes No Not Sure

11.6 Have an Anti-discrimination policy?

Yes No Not Sure

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12

Does your company _____

12.1 Utilize a structured interviewing process?

Yes No Not Sure

12.2 Identify ways that candidates can demonstrate job qualifications beyond traditional experiences?

Yes No Not Sure

12.3 Require hiring managers to interview a diverse group of candidates?

Yes No Not Sure

13

Does your company _____

13.1 Offer internal leadership development training?

Yes No Not Sure

13.2 Ensure that a diverse group of employees is receiving mentoring?

Y Yes No Not Sure

13.3 Support employee participation in professional associations targeting diverse groups, such as women's professional associations?

Yes No Not Sure

14

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Does your company offer _____

14.1 Flexible work scheduling?

Yes No Not Sure

14.2 Work-at-home option?

Yes No Not Sure

14.3 Job sharing?

Yes No Not Sure

14.4 Reduced work hours?

Yes No Not Sure

14.5 Modified work week, such as a condensed work week (fewer than 5 days)?

Yes No Not Sure

14.6 Part-time employment for professional/technical/managerial staff?

Yes No Not Sure

14.7 Dependent care resource and referral service?

Yes No Not Sure

14.8 Paid Maternity or Paternity leave?

Yes No Not Sure

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Does your company offer _____

15.1 Employee Assistance Programme or Mental Health support?

Yes No Not Sure

15.2 Further Education scheme?

Yes No Not Sure

15.3 Healthcare benefits or Life insurance?

Yes No Not Sure

15.4 Accessibility support for all roles?

Yes No Not Sure

Inclusive Leadership

17

My manager is open to hearing new ideas.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

17

My manager is attentive to new opportunities to improve work processes.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

18

My manager is open to discuss the desired goals and new ways to achieve them.

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Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

19

My manager is available for consultation on problems.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

20

My manager is an ongoing 'presence' in this team; someone who is readily available.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

21

My manager is available for professional questions I would like to consult with them.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

22

My manager is ready to listen to my requests.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

23

My manager encourages me to access them on emerging issues.

Not at all	Very Little	Somewhat	Often	To a very large extent
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

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24

My manager is accessible for discussing emerging problems.

Not at all Very Little Somewhat Often To a very large extent

1

2

3

4

5

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Appendix C

Table 8

		Count	Column N %
Q.11.1 Include valuing diversity in the company's mission or values statement	No	10	13.0%
	Not sure	15	19.5%
	Yes	52	67.5%
Q.11.2 Align diversity strategy with the business strategy	No	11	14.3%
	Not sure	27	35.1%
	Yes	39	50.6%
Q.11.3 Have an internal diversity/inclusiveness committee or council	No	14	18.2%
	Not sure	15	19.5%
	Yes	48	62.3%
Q.11.4 Set goals for achieving staff diversity for specific positions	No	13	16.9%
	Not sure	39	50.6%
	Yes	25	32.5%
Q.11.5 Communicate Diversity and Inclusion reports	No	26	33.8%
	Not sure	24	31.2%
	Yes	27	35.1%
Q.11.6 Have an Anti-discrimination policy	No	4	5.2%
	Not sure	4	5.2%
	Yes	69	89.6%
Q.12.1 Utilize a structured interviewing process	No	4	5.2%
	Not sure	5	6.5%
	Yes	68	88.3%
Q.12.2 Identify ways that candidates can demonstrate job qualifications beyond traditional experiences	No	19	24.7%
	Not sure	16	20.8%
	Yes	42	54.5%
Q.12.3 Require hiring managers to interview a diverse group of candidates	No	11	14.3%
	Not sure	29	37.7%
	Yes	37	48.1%
Q.13.1 Offer internal leadership development training	No	9	11.7%
	Not sure	8	10.4%
	Yes	60	77.9%

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Q.13.2 Ensure that a diverse group of employees is receiving mentoring	No	11	14.3%
	Not sure	25	32.5%
	Yes	41	53.2%
Q.13.3 Support employee participation in professional associations targeting diverse groups	No	11	14.3%
	Not sure	14	18.2%
	Yes	52	67.5%
Q.14.1 Flexible work scheduling	No	13	16.9%
	Not sure	0	0.0%
	Yes	64	83.1%
Q.14.2 Work-at-home option	No	13	16.9%
	Not sure	1	1.3%
	Yes	63	81.8%
Q.14.3 Job sharing	No	23	29.9%
	Not sure	34	44.2%
	Yes	20	26.0%
Q.14.4 Reduced work hours	No	20	26.0%
	Not sure	27	35.1%
	Yes	30	39.0%
Q.14.5 Modified work week, such as a condensed work week (fewer than 5 days)	No	38	49.4%
	Not sure	15	19.5%
	Yes	24	31.2%
Q.14.6 Part-time employment for professional/technical/managerial staff	No	25	32.5%
	Not sure	24	31.2%
	Yes	28	36.4%
Q.14.7 Dependent care resource and referral service	No	15	19.5%
	Not sure	28	36.4%
	Yes	34	44.2%
Q.14.8 Paid Maternity or Paternity leave	No	2	2.6%
	Not sure	4	5.2%
	Yes	71	92.2%
	No	3	3.9%

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Q.15.1 Employee Assistance Programme or Mental Health support	Not sure	8	10.4%
	Yes	66	85.7%
Q.15.2 Further Education scheme	No	4	5.2%
	Not sure	9	11.7%
	Yes	64	83.1%
Q.15.3 Healthcare benefits or Life insurance	No	3	3.9%
	Not sure	1	1.3%
	Yes	73	94.8%
Q.15.4 Accessibility support for all roles	No	7	9.1%
	Not sure	21	27.3%
	Yes	49	63.6%

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Appendix D

Table 9

		Count	Column N %
Q.16 My manager is open to hearing new ideas.	Not at all	0	0.0%
	Very little	2	2.6%
	Somewhat	9	11.7%
	Often	21	27.3%
	To a very large extent	45	58.4%
Q.17 My manager is attentive to new opportunities to improve work processes.	Not at all	1	1.3%
	Very little	2	2.6%
	Somewhat	10	13.0%
	Often	21	27.3%
	To a very large extent	43	55.8%
Q.18 My manager is open to discuss the desired goals and new ways to achieve them.	Not at all	0	0.0%
	Very little	3	3.9%
	Somewhat	8	10.4%
	Often	26	33.8%
	To a very large extent	40	51.9%
Q.19 My manager is available for consultation on problems.	Not at all	1	1.3%
	Very little	3	3.9%
	Somewhat	12	15.6%
	Often	20	26.0%
	To a very large extent	41	53.2%
Q.20 My manager is an ongoing 'presence' in this team; someone who is readily available.	Not at all	0	0.0%
	Very little	6	7.8%
	Somewhat	14	18.2%
	Often	24	31.2%
	To a very large extent	33	42.9%
Q.21 My manager is available for professional questions I would like to consult with them.	Not at all	0	0.0%
	Very little	3	3.9%
	Somewhat	10	13.0%
	Often	22	28.6%
	To a very large extent	42	54.5%

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Q.22 My manager is ready to listen to my requests.	Not at all	0	0.0%
	Very little	3	3.9%
	Somewhat	13	16.9%
	Often	19	24.7%
	To a very large extent	42	54.5%
Q.23 My manager encourages me to access them on emerging issues.	Not at all	3	3.9%
	Very little	2	2.6%
	Somewhat	11	14.3%
	Often	22	28.6%
	To a very large extent	39	50.6%
Q.24 My manager is accessible for discussing emerging problems.	Not at all	1	1.3%
	Very little	2	2.6%
	Somewhat	17	22.1%
	Often	14	18.2%
	To a very large extent	43	55.8%

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Appendix E

Table 10

D&I Practices	Respondent	Yes	Not sure	No
<i>Total</i>	77	1146	393	309
<i>Min</i>		2	0	0
<i>Max</i>		22	15	20
<i>Average Per Respondent</i>		15	5	4